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SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF LOS ANGELES
DEPARTMENT 324 HON. VICTORIA G. CHANEY, JUDGE

FREDRIC RELLER,)
)
PLAINTIFF,)
)
VS.) SUPERIOR COURT
) CASE NO. BC 261796
PHILIP MORRIS, INCORPORATED,)
A CORPORATION, ET AL.,)
)
DEFENDANTS.)
)

REPORTER'S DAILY TRANSCRIPT OF PROCEEDINGS
FRIDAY, JUNE 27, 2003
P.M. SESSION
PAGES 7647 THROUGH 7753, INCLUSIVE
APPEARANCES:

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LINDA BICHE CSR NO. 3359, RMR, CRR
OFFICIAL REPORTER

0002

I N D E X

FRIDAY, JUNE 27, 2003..... 7647:3
12:16 P.M..... 7647:7

WITNESSES

LEVON QASABIAN

DIRECT EXAMINATION (RESUMED) BY MR. PIUZE..... 7648:4
REDIRECT EXAMINATION BY MR. PIUZE..... 7658:17

PAUL MELE

DEPOSITION WAS READ BY THE PLAINTIFF..... 7660:7
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EXHIBITS

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CASE NUMBER: BC 261796
CASE NAME: RELLER V. PHILIP MORRIS
LOS ANGELES, CALIFORNIA FRIDAY, JUNE 27, 2003
DEPARTMENT 324 HON. VICTORIA G. CHANEY, JUDGE
APPEARANCES: (AS NOTED ON TITLE PAGE.)
REPORTER: LINDA BICHE, CSR NO. 3359, RMR, CRR
TIME: 12:16 P.M.

- - O - -

LEVON QASABIAN,
WITNESS, RESUMED THE STAND AND TESTIFIED FURTHER AS FOLLOWS:

THE COURT: BACK IN THE MATTER OF RELLER VERSUS PHILIP MORRIS, BC 261796.

THE RECORD SHOULD REFLECT THAT ALL TWELVE JURORS, THE FOUR ALTERNATES ARE PRESENT.

ALL COUNSEL PREVIOUSLY STATED ARE PRESENT.

DR. LEWIS IS PRESENT.

DR. QASABIAN --

I SAID IT RIGHT?

THE WITNESS: YES.

THE COURT: -- IS PRESENT IN THE WITNESS STAND.

SOME OF YOU LOOK A BIT CHILLY. WE CANNOT GET THIS COURTROOM RIGHT. IT'S EITHER REALLY HOT OR REALLY COLD, AND MY FEELING IS IT'S EASIER TO GET WARM IN A COLD COURTROOM THAN IT IS TO GET COOL AND COMFY -- I SEE YOU'VE GOT ON YOUR SWEATERS -- THAN TO GET COOL AND COMFY IN A HOT COURTROOM. SO, YOU KNOW, WHERE WE CAN'T GET IT RIGHT, IT'S THE NEXT BEST

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THING.

CLOCK IS TICKING.

DIRECT EXAMINATION (RESUMED)

BY MR. PIUZE:

Q. DO YOU BELIEVE THAT MR. RELLER HAS TRIED REALLY HARD TO STAY AS WELL AS HE CAN?

A. YES.

Q. DO YOU BELIEVE THAT MR. RELLER HAS A REALLY POSITIVE ATTITUDE ABOUT HIS ODDS?

A. YES, HE DOES.

Q. SOME OF US LAY PEOPLE HERE, CANCER VICTIMS SAY, I CAN BEAT IT.

ARE YOU FAMILIAR WITH SOMETHING LIKE THAT?

A. YES.

Q. CAN HE BEAT IT?

A. NO.

Q. DOES HE HAVE A FATAL DISEASE?

A. YES.

Q. YOU MENTIONED IN ONE OF YOUR EARLIER ANSWERS, STAGE 3B?

A. THAT'S CORRECT.

Q. WHEN HE CAME TO SEE YOU, WAS HE A STAGE 3B LUNG CANCER?

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A. YES.
Q. WHAT DOES THAT MEAN?
A. WE GRADE THE PATIENTS. STAGE 1 WOULD BE A VERY LOW-LEVEL TUMOR BURDEN, AND STAGE 4 IS THE WORST.

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AND LUNG CANCER, 3B HAS ABOUT THE SAME SURVIVAL AS STAGE 4, WHICH IS TERMINAL.
Q. OKAY. SO IS 3B SOMETHING LIKE 3-1/2, SOMETHING BETWEEN 3 AND 4?
A. YEAH, RIGHT.
Q. WHAT IS THE LONG-TERM SURVIVAL FOR A 3B CANCER PATIENT, SUCH AS MR. RELLER, WHEN HE CAME TO SEE YOU?
A. UNTREATED PATIENTS, 3B, TYPICALLY SURVIVE FOUR TO EIGHT MONTHS. WITH THE NEWER TREATMENTS, WE'RE GETTING SURVIVALS -- YOU'RE GETTING ABOUT 30 TO 40 PERCENT PATIENTS SURVIVING UP TO TWO YEARS. SURVIVAL, NOT CURED.
Q. RIGHT. AND WHEN DOES THE -- MY CLOCK JUST STARTED TICKING HERE, BUT WHEN DOES THAT CLOCK START TICKING, ON THE DATE OF DIAGNOSIS, OR WHEN?
A. AT THE DATE OF DIAGNOSIS.
Q. WHEN HE WAS ORIGINALLY DIAGNOSED DOWN AT COUNTY-USC, WAS HE A 3B ALREADY?
A. YES.
Q. WAS THAT IN DECEMBER OF 2000?
A. YEAH. BUT HE WAS DIAGNOSED AT DANIEL FREEMAN, RIGHT.
Q. NOVEMBER OF 2000?
A. THAT'S CORRECT.
Q. SO IF HIS CLOCK STARTED TICKING IN NOVEMBER OF 2000 AS A STAGE 3B ADENOCARCINOMA PATIENT, STARTING THEN, HE HAD ABOUT A 40 PERCENT CHANCE OF MAKING IT TWO YEARS?
A. THAT'S CORRECT.
Q. AND THAT TWO YEARS WOULD HAVE BEEN OVER LAST

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NOVEMBER?
A. THAT'S CORRECT.
Q. AND WE'RE AIMING FOR THE THIRD YEAR NOW?
A. YES.
Q. SO HAS HE DONE VERY WELL?
A. HE'S IN THE MINORITY OF THE PATIENTS THAT GO BEYOND TWO YEARS. YES. HE'S DONE WELL.
Q. DO YOU THINK HE'S GOING TO MAKE IT TO NOVEMBER OF 2003?
A. IT'S CUTTING IT CLOSE. I HOPE SO. BUT THERE'S A LOT OF DOUBT IN MY MIND.
Q. WHY?
A. WELL, HE HAD -- IN MARCH AND APRIL, HE HAD VERY -- HE HAD NEAR FATAL EXPERIENCES WITH PULMONARY EMBOLISM AND THE BLEEDING IN THE LUNG. THEY WERE ALL VERY CLOSE TO BEING FATAL. IT'S JUST A MATTER OF TIME BEFORE HE DEVELOPS ANOTHER POTENTIALLY FATAL COMPLICATION OR PROGRESSION OF DISEASE OR NEW SITE OF TUMOR.
Q. CAN MR. RELLER DIE, BASICALLY, AT ANY TIME?
A. YES.
Q. IS IT FOR 100 PERCENT CERTAINTY THAT IN THE NOT TOO DISTANT FUTURE, HE'S GOING TO DIE OF LUNG CANCER OR A COMPLICATION OF LUNG CANCER?
A. UNLESS HE GETS HIT BY A CAR, YES.
Q. OKAY. WHAT ARE YOU DOING WITH HIM, FOR HIM, TO HIM NOW?
A. WELL, AFTER THE RADIATION IS COMPLETED, WE WILL GET ENOUGH BLOOD LEVELS OF THE CEA, ANOTHER SET OF CAT SCANS,

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AND THEN WATCH.
Q. DO YOU FORESEE ANY FURTHER CHEMOTHERAPY TREATMENTS IN THE FUTURE?
A. YES. IF HE'S STILL FUNCTIONALLY WITH IT, I MEAN, HE'S STILL ABLE TO GET AROUND AND ABLE TO TOLERATE CHEMOTHERAPY, HE WOULD BE A CANDIDATE FOR A THIRD CYCLE OF CHEMOTHERAPY.
Q. HOW MANY TIMES HAVE YOU SEEN HIM SINCE HE STARTED WITH HIS CURRENT RADIATION THERAPY REGIME, PLEASE?
A. JUST ONCE.
Q. AND WHEN WAS THAT, PLEASE?
A. JUNE 9TH, 2003.
Q. CAN YOU TELL US HOW HE WAS DOING ON JUNE 9TH, 2003, WHAT SYMPTOMS HE HAD, WHETHER HE NEEDED OXYGEN, WHETHER HE WAS UP AND ABOUT, STUFF LIKE THAT?
A. YEAH. HE WAS OFF THE OXYGEN. WHEN I CHECKED HIM IN THE OFFICE, HIS OXYGENATION WAS MARGINAL, BUT HE WAS OFF OF IT. SO WITH A LITTLE BIT OF EXERTION, HE'S -- HE GETS SHORT OF BREATH, OBVIOUSLY. BUT FOR HIS JOB, WHICH IS SEDENTARY AT A DESK, HE'S ABLE TO CONTINUE WORKING. AND HE WAS QUITE UPBEAT, ACTUALLY. HE WAS NOT COUGHING UP ANY BLOOD. THAT HAD STOPPED.
Q. WHEN YOU SAY HIS OXYGENATION WAS MARGINAL, WHAT DO YOU MEAN BY THAT?
A. WELL, WE CHECK HIS OXYGEN SATURATION WITH A PULSE OXIMETER THAT WE HAVE IN THE OFFICE, SO WE CAN CHECK THE AMOUNT OF OXYGEN SATURATION IN HIS BLOOD WAS 90 PERCENT, WHICH IS BORDERLINE. ANYTHING BELOW OR LOWER THAN 90 PERCENT

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NEEDS OXYGEN SO THEY FEEL COMFORTABLE, SO THEY'RE NOT SHORT OF BREATH.
Q. DURING THIS PAST SPRING, LATE WINTER, EARLY SPRING AND INTO THE LATE SPRING, HAS MR. RELLER REQUIRED OXYGEN FOR A GOOD PORTION OF THAT TIME?
A. YES. AFTER THE INITIAL BLOOD CLOTS, HE REQUIRED OXYGEN TO MAINTAIN COMFORT.
Q. SO WHEN HE WAS AT HOME, OXYGEN?
A. YES. HE HAD AN OXYGEN TANK AT HOME.
MR. PIUZE: OKAY. I DON'T THINK I'VE GOT ANY FURTHER QUESTIONS.
THANK YOU VERY MUCH.
THE COURT: MS. WILKINSON.

CROSS-EXAMINATION

BY MS. WILKINSON:
Q. DR. QASABIAN, WE MET OUT IN THE HALLWAY --
A. YES.
Q. -- JUST A MINUTE AGO?
I ASKED YOU ABOUT YOUR WORK THAT YOU NEEDED TO GET BACK TO, RIGHT?
A. YES.
Q. I HAD TOLD YOU I WOULDN'T HAVE TOO MANY QUESTIONS FOR YOU?
A. YES.
Q. I'M GOING TO TRY TO KEEP THAT PROMISE WITH THE JURORS AND THE JUDGE, THEY KNOW THAT LAWYERS TRY. WE ALWAYS SAY THAT. WE'RE NOT ALWAYS SO GOOD AT IT, BUT I'M GOING TO

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TRY.
ALL RIGHT?
A. OKAY.
Q. SO I UNDERSTAND THE TIME LINE, MR. RELLER WAS DIAGNOSED IN NOVEMBER OF 2000?

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A. RIGHT.
Q. AND TREATED AT SEVERAL DIFFERENT HOSPITALS BEFORE HE WAS REFERRED TO YOU, RIGHT?
A. YES.
Q. HE WAS AT UCLA RIGHT BEFORE HE CAME TO YOU?
A. USC.
Q. USC. EXCUSE ME.
A. COUNTY-USC.
Q. RIGHT. AND HE COULD HAVE STAYED THERE FOR TREATMENT, BUT HE WAS REFERRED TO YOU?
A. RIGHT.
Q. IN PART BECAUSE OF YOUR REPUTATION, RIGHT?
A. I HOPE SO, BUT ACTUALLY BECAUSE HE WASN'T HAPPY WITH THE COUNTY.
Q. OKAY. AND YOU DON'T WORK FOR THE COUNTY?
A. WELL, I -- ACTUALLY, I VOLUNTEER FOR THE COUNTY AT TIMES.
Q. BUT NOT FOR HIS CASE?
A. RIGHT.
Q. HE'S A PRIVATE PATIENT OF YOURS?
A. HE'S A PRIVATE PATIENT OF MINE.
Q. AND WHEN YOU FIRST STARTED TO TREAT HIM, HE HAD ALREADY FINISHED HIS FIRST COURSE OF CHEMOTHERAPY?

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A. THAT'S CORRECT.
Q. AND THAT'S ONE OF THE REASONS YOU WAITED AND WATCHED HIM FOR A YEAR, BECAUSE YOU DIDN'T THINK AT THAT POINT HE NEEDED -- CHEMOTHERAPY WOULD BE HELPFUL AT THAT POINT?
A. RIGHT. HE WOULDN'T BENEFIT FROM IT.
Q. OKAY. SO YOU STARTED HIS DIAGNOSIS IN NOVEMBER OF 2000.
WHEN DID YOU FIRST SEE HIM?
A. VERY FIRST TIME I SAW HIM WAS JULY 30, 2001.
Q. SO THAT'S ABOUT SIX MONTHS --
A. RIGHT.
Q. -- AFTER HE WAS DIAGNOSED.
AND YOU WAITED ALMOST A YEAR UNTIL YOU DECIDED IT WAS APPROPRIATE TO GIVE HIM ANOTHER COURSE OF CHEMOTHERAPY?
A. THAT'S CORRECT.
Q. DURING THAT TIME PERIOD AS YOU WERE MONITORING HIM, HE WAS GOING BACK TO HIS JOB, RIGHT?
A. THAT'S CORRECT.
Q. HAVE YOU UNDERSTOOD FROM SPEAKING TO HIM THAT HE RUNS HIS OWN BUSINESS?
A. I'M NOT SURE OF -- IF IT'S HIS OWN BUSINESS, BUT, YES, SOMETHING LIKE THAT.
Q. HE RUNS A LEASING EQUIPMENT BUSINESS?
A. RIGHT.
Q. AND WHEN YOU GAVE HIM THE CHEMOTHERAPY, YOU TRIED TO ADJUST IT SO THAT HE COULD WORK WHENEVER POSSIBLE?

7655

A. THAT WASN'T THE MAIN GOAL. THE MAIN GOAL WAS TO MAINTAIN HIS QUALITY OF LIFE.
Q. AND HE ASKED FOR THAT, RIGHT?
A. WELL, THAT'S WHAT WE TRY. THAT'S THE GOALS OF OUR THERAPY, IS QUALITY OF LIFE. IT'S NOT --
Q. AND HE'S TALKED TO YOU ABOUT WANTING TO RETURN TO WORK WHENEVER HE COULD, RIGHT?
A. RIGHT.
Q. AND HE'S DONE THAT WHEN HE'S -- WHEN HE COMPLETED HIS TREATMENT, THE TREATMENT --

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A. RIGHT.
Q. -- YOU GAVE HIM?
AND THEN OVER THESE LAST FEW MONTHS, YOU WERE TALKING ABOUT THERE'S ONE INCIDENT IN JANUARY, AND THEN THERE WERE A FEW INCIDENTS, SEVERAL, WHERE YOU HAD TO HOSPITALIZE HIM IN APRIL AND MAY?
OR WAS IT MARCH AND APRIL?
A. MARCH AND APRIL.
Q. IT WAS MARCH AND APRIL.
AND DURING THAT TIME, YOU'VE ALWAYS TRIED TO MAKE HIM AS COMFORTABLE AS POSSIBLE?
A. THAT'S CORRECT.
Q. AND HAVE ENABLED, EVEN UP UNTIL RECENTLY, ENABLED HIM TO GO BACK TO WORK?
A. YES.
Q. AND THE RADIATION SHOULD END ANY DAY NOW, YOU THINK?
A. YES.

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Q. YOU WERE TALKING ABOUT HIS ADENOCARCINOMA.
ARE THERE SUBTYPES OF ADENOCARCINOMA?
A. WELL, THERE'S DIFFERENT -- WE DON'T DISTINGUISH BETWEEN THE DIFFERENT TYPES. ACTUALLY, EVEN WITH NONSMALL-CELL LUNG CANCERS, THERE'S ADENOCARCINOMA, THERE'S SQUAMOUS. THEY ALL BEHAVE ABOUT THE SAME.
Q. SO FOR PURPOSES OF YOUR TREATMENT, YOU DON'T HAVE TO MAKE A DETERMINATION OF WHETHER HE HAS SOME SUBTYPE, LIKE PSEUDOMESOTHELIOMATOUS ADENOCARCINOMA TO TREAT HIM, RIGHT?
A. WELL, YES.
Q. THAT WASN'T RELEVANT TO YOU?
A. NO, NOT RELEVANT.
Q. AND DO YOU KNOW DR. SAMUEL HAMMER?
A. NO, I DON'T KNOW HIM.
Q. YOU'VE NEVER SPOKEN TO HIM ABOUT HIS FURTHER DIAGNOSIS OF DR. RELLER --
A. NO.
Q. -- MR.
A. MR. RELLER.
Q. I'M SORRY. MR. RELLER.
A. YEAH.
Q. AS YOU FIRST STARTED TO INTERVIEW AND TREAT MR. RELLER, YOU DID NOT THINK HIS PROGNOSIS WAS VERY GOOD, RIGHT?
A. I STILL DON'T THINK HIS PROGNOSIS IS GOOD, RIGHT.
Q. SURE. BUT I'M TALKING ABOUT BACK THEN.

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A. RIGHT.
Q. YOU DID NOT, RIGHT?
A. RIGHT.
Q. AND IN FACT, YOU SAID YOU DIDN'T BELIEVE, BASED ON A REASONABLE MEDICAL CERTAINTY, THAT HE WOULD SURVIVE LONGER THAN SIX MONTHS, RIGHT?
A. WITHOUT TREATMENT. THAT'S THE DATA.
Q. DIDN'T YOU FILE AN AFFIDAVIT IN THIS CASE LAST SEPTEMBER SAYING -- AND YOU WERE TREATING HIM THEN, RIGHT?
A. UH-HUH.
Q. YOU WERE IN THE MIDDLE OF THE CHEMOTHERAPY, RIGHT?
A. RIGHT.
Q. AND DIDN'T YOU FILE AN AFFIDAVIT SAYING THAT YOU DIDN'T THINK THAT IT WAS LIKELY THAT HE WOULD SURVIVE

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BEYOND SIX MONTHS?
A. THAT'S CORRECT.
Q. AND THAT'S BASED ON WHAT YOUR KNOWLEDGE IS OF THE LIKELIHOOD OF --
A. RIGHT.
Q. -- SURVIVAL?
A. RIGHT.
Q. THIS TYPE OF TERMINAL DISEASE?
A. THAT'S CORRECT.
Q. SO MR. RELLER HAS, THANKFULLY, DONE BETTER THAN THE STATISTICS, RIGHT?
A. YEAH, HE'S DONE BETTER THAN THE STATISTICS.
Q. AND THAT DOESN'T MEAN HE'S GOING TO BEAT THE

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DISEASE, AS YOU SAID. IT JUST MEANS, IN THIS PARTICULAR CASE, YOU CAN'T SAY HOW MUCH BETTER HE'S GOING TO DO THAN THE STATISTICS?
A. THAT'S RIGHT.
Q. AND WHEN YOU DO THE ADDITIONAL TESTS THAT YOU TALKED ABOUT, THE CEA MEASUREMENTS AND THE CAT SCAN, YOU'LL HAVE A BETTER IDEA OF HOW FAR HE'S -- HOW HE'S DOING BASED UPON THE RADIATION?
A. YES. I'LL HAVE A NEW BASELINE TO COMPARE.
Q. AND THAT COULD BETTER INFORM YOU ABOUT WHAT HIS PROGNOSIS IS?
A. RIGHT.
MS. WILKINSON: I DON'T HAVE ANY OTHER QUESTIONS. THANK YOU VERY MUCH.
THE COURT: MR. PIUZE.

REDIRECT EXAMINATION

BY MR. PIUZE:
Q. JUST SO THERE'S NO CONFUSION, FROM A REASONABLE MEDICAL PROBABILITY, IS HIS LIFE EXPECTANCY SIX MONTHS OR LESS?
A. I WOULD -- YEAH. WITH SOME UNCERTAINTY, YEAH, I WOULD SAY SIX MONTHS OR LESS.
MR. PIUZE: THAT'S ALL.
THE COURT: MS. WILKINSON.
MR. PIUZE: THANK YOU VERY MUCH.
THE COURT: NOTHING FURTHER?
MAY THIS WITNESS BE EXCUSED, MR. PIUZE?

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MAY THIS WITNESS BE EXCUSED?
MR. PIUZE: YOUR HONOR, IN ACCORDANCE WITH DISCUSSION OF COURT AND COUNSEL -- MAY THIS WITNESS BE EXCUSED?
THE COURT: THANK YOU. YES.
MR. PIUZE: THANK YOU.
THE COURT: YES, OF COURSE.
DO YOU HAVE A PROBLEM WITH THAT?
MS. WILKINSON: ABSOLUTELY NOT, YOUR HONOR.
THE COURT: ALL RIGHT. THANK YOU VERY MUCH FOR COMING.
THE WITNESS: THANK YOU.
THE COURT: IT WAS NICE MEETING YOU.
MR. PIUZE: I APOLOGIZE. I WAS OFF TO THE NEXT ISSUE.
THE COURT: OKAY. WHAT ARE WE DOING NOW, FOLKS?
MR. PIUZE: SO AS I WAS SAYING, IN ACCORDANCE WITH THE CONFERENCE BETWEEN COURT AND COUNSEL, WE'RE GOING TO RESUME THE READING OF DR. MELE'S DEPOSITION FROM LAST THURSDAY. A WEEK AGO THURSDAY.
THE COURT: OKAY.

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FOLKS, YOU HAVE TO PUT YOUR MINDS BACK AND REMEMBER THE DEPOSITION WHEN MR. GOLDSTEIN AND MR. PIUZE WERE READING THE DEPOSITION. I'M SORRY ABOUT THE CHOPPINESS OF IT. COUNSEL HAS TRIED NOT TO DO THAT TO YOU. WE'VE ACTUALLY DONE VERY, VERY WELL ABOUT NOT HAVING CHOPPY TESTIMONY.

(SHORT PAUSE.)

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THE COURT: MR. GOLDSTEIN, YOU'RE GOING TO BE PLAY-ACTING.

IS IT DR. MELE OR MR. MELE?

MR. GOLDSTEIN: DR. MELE, YOUR HONOR.

THE COURT: GREAT. THANK YOU.

(MR. PAUL MELE'S DEPOSITION WAS READ BY THE PLAINTIFF, BY MR. PIUZE AND MR. GOLDSTEIN, AND REPORTED AS FOLLOWS:)

MR. PIUZE: READY?

MR. GOLDSTEIN: YES.

MR. PIUZE: (READING:)

Q. YOU KNOW, DR. MELE, IN TERMS OF YOUR BEING TOLD THE LAB WAS CLOSED FOR BUSINESS REASONS, LET ME ASK YOU THIS: FROM YOUR STANDPOINT, WAS THERE ANY VALID SCIENTIFIC REASON TO CLOSE THE LAB?

A. WE WERE NEVER GIVEN ANY REASON SCIENTIFICALLY WHY THE LAB SHOULD NOT CONTINUE. THERE WAS NEVER ANYTHING BUT THE HIGHEST REGARD FOR THE LAB AND THE WORK AT PHILIP MORRIS.

Q. AT THE TIME THE LAB WAS CLOSED IN APRIL OF' 84, HAD YOU COMPLETED

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YOUR RESEARCH?

A. NO. WE HAD A NUMBER OF PROJECTS ONGOING. WE HAD COMPLETED SOME STUDIES. WE WERE IN THE MIDDLE OF OTHERS. WE WERE ABOUT TO START YET ANOTHER SERIES. ONE STUDY OFTEN LEADS TO ANOTHER. THERE WERE MANY QUESTIONS TO BE ASKED. WE HAD IDENTIFIED TWO CANDIDATE ANALOGS THE COMPANY HAD ASKED US TO LOOK FOR. BUT THERE WERE CLEARLY A NUMBER OF OTHER ISSUES THEY ASKED US TO PURSUE, AND THOSE ANSWERS HAD NOT BEEN COMPLETED. THOSE STUDIES WERE NOT FINISHED.

Q. WHEN THE PRESIDENT OF PHILIP MORRIS WAS IN THE LABORATORY, DID YOU HAVE ANY DIRECT DISCUSSION WITH HIM?

A. YES.

Q. TELL US WHAT HE SAID TO YOU, WHAT YOU SAID TO HIM.

A. MR. POLLACK AND MR. NEWMAN AND THE OTHER GROUPS HAD TOOK A TOUR OF THE LAB. THEY WANTED TO SEE THE RATS WORKING IN THE BOX, SO THEY GOT TO SEE

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A RAT SELF-ADMINISTERING NICOTINE.
THE LAB IS COMPOSED OF A SERIES OF
ROOMS THAT ARE INTERCONNECTED. WHEN

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WE WERE OUT IN ONE OF THE MAIN ROOMS,
I WAS THERE WITH MR. POLLACK AND
SEVERAL OTHER PEOPLE, AND HE
ASKED -- HE ASKED -- I DON'T REMEMBER
THE EXACT WORDS -- EITHER, IS NICOTINE
OR IS CIGARETTE SMOKING ADDICTING.

Q. DID YOU ANSWER HIM?

A. THE ANSWER I GAVE WAS THAT
THERE WAS A LOT OF WORK THAT NEEDED TO
BE DONE TO ADDRESS THAT QUESTION ON
NICOTINE. WE HAD ANSWERED SOME OF THE
QUESTIONS FROM OUR WORK WITH
SELF-ADMINISTRATION AND OUR TOLERANCE
STUDIES. WE FELT WE NEEDED TO DO MORE
WORK. WE HAD OTHER WORK IN PROGRESS
AND WE FELT THE WORK NEEDED TO
CONTINUE TO ADDRESS THAT MORE
DIRECTLY.

MR. PIUZE: 17767.
MR. GOLDSTEIN: CORRECT, ON LINE 7.
MR. PIUZE: (READING:)

Q. NOW, I BELIEVE YOU MENTIONED
AT SOME POINT DURING SEVERAL MONTHS
PRIOR TO -- TO THE ACTUAL CLOSING,
PHILIP MORRIS LAWYERS FROM A LAW FIRM
CAME TO VISIT THE LAB?

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A. CORRECT.

Q. DID YOU HAVE ANY DIRECT
INTERACTION WITH THEM?

A. YES. QUITE A BIT.

Q. DON'T TELL ME WHAT THE LAWYERS
SAID, IF ANYTHING.
WHAT DID YOU SEE THEM DO, IF
ANYTHING?

A. THEY CAME IN.

Q. IN THE LABORATORY?

A. THE LAWYERS SAW THE LAB. THEY
SAW THE ANIMALS. THEY SAW OUR
OFFICES. THEY SAW ALL OUR FILES.
THEY SAW THE LITERATURE WE READ. THEY
SAW THE DATA WE COLLECTED. THEY SAW
THE REPORTS WE WROTE.

Q. THEY REVIEWED EVERYTHING?

A. CORRECT.

Q. NOW, WHEN THE LABORATORY WAS
FINALLY CLOSED, DID THAT COME OUT OF
THE BLUE? I MEAN, I KNOW THERE WERE
EVENTS WHICH MADE YOU RECOGNIZE THERE
WAS A POSSIBILITY THAT THE LABORATORY
WOULD BE CLOSED, BUT ON THAT
PARTICULAR DAY, DID YOU HAVE ANY
WARNING THAT IT WAS GOING TO HAPPEN
THAT DAY?

A. OUR LIFE FOR THE LAST SEVERAL

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MONTHS THERE WAS A ROLLER COASTER. WE

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WERE UP AND DOWN. BUT AT THAT TIME, AND FOR A PERIOD OF TIME BEFORE THAT, A MONTH, TWO OR THREE, WE HAD NO WARNING. WE WERE -- WE FELT WE WERE GOOD TO GO.

Q. WHO TOLD YOU THE LAB -- WHO ACTUALLY WAS THE PERSON WHO SAID TO YOU, YOUR WORK IS DONE, THE LAB'S CLOSED?

A. JIM CHARLES.

Q. AND YOU SAY WHY, AND HE SAYS, IT'S A BUSINESS DECISION?

A. RIGHT.

Q. OKAY. FROM THE TIME YOU GO TO PHILIP MORRIS UNTIL THE TIME YOU'RE TOLD THE LABORATORY IS CLOSED, YOU ALWAYS WORKED IN THE RAT LABORATORY?

A. CORRECT.

Q. AND THEN ON APRIL 5, '84, YOU'RE TOLD THE RAT LABORATORY IS GONE?

A. I WAS TOLD, PHILIP MORRIS DOES NOT DO BEHAVIORAL PHARMACOLOGY ANYMORE. CLOSE THE LAB.

Q. IN YOUR OWN MIND, FROM YOUR STANDPOINT IN TERMS OF HOW YOU LEFT THE EMPLOYMENT OF PHILIP MORRIS, DID

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YOU QUIT? WERE YOU FIRED?

A. WE WERE FIRED. WE WERE -- I DON'T KNOW WHAT ELSE TO CALL IT. WE WERE JUST FIRED AND TOLD TO LEAVE.

Q. YOU WERE NEVER OFFERED A SUBSTITUTE JOB?

A. NEVER.

Q. DID ANYONE EXPLAIN TO YOU WHY THE LAB HAD TO BE CLOSED LIKE THIS AND WHY THE RATS HAD TO BE KILLED SO QUICKLY?

WAS THAT EVER EXPLAINED?

A. NO.

Q. OKAY.

A. IN FACT, I WOULD JUST SAY, WE ASKED FOR ONE MORE DAY TO FINISH ONE EXPERIMENT, AND THAT WAS DENIED.

Q. NOW, YOU KNOW, I NOTICE -- I NOTICE IN LOOKING AT YOUR CURRICULUM VITAE THAT THERE'S A SECTION WHICH SAYS, "TECHNICAL REPORTS, PROPRIETARY RESTRICTION, PHILIP MORRIS, USA, INC." AND IT'S REPORTS BY YOU AND DR. DE NOBLE RELATING TO NICOTINE ADMINISTRATION WITH THE RATS.

A. RIGHT.

Q. THESE ARE ARTICLES YOU WROTE OR YOU WERE THINKING ABOUT WRITING?

7666

A. THOSE WERE TITLES OF EXPERIMENTS WE RAN AT PHILIP MORRIS. THOSE WERE PAPERS WE WOULD HAVE LIKED TO HAVE PUBLISHED. WE WERE NOT ALLOWED -- I DON'T REMEMBER EXACTLY WHICH ONES ARE THERE. WE WERE NOT

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ALLOWED TO PUBLISH THOSE STUDIES. WHEN YOU'RE SEARCHING FOR A JOB AND YOU'VE BEEN SOMEWHERE FOR THREE YEARS AS A SCIENTIST AND YOU HAVE A THREE-YEAR BLOCK WITH NO PUBLICATIONS, THAT CERTAINLY DOESN'T MAKE YOU MORE EMPLOYABLE.

SO WE WORKED OUT WITH PHILIP MORRIS THAT WE WANTED TO LET THE WORLD KNOW, TO HAVE SOME INDICATION THAT WE WERE ACTIVELY DOING RESEARCH WHILE WE WERE THERE, EVEN THOUGH WE WERE NOT ABLE TO PRODUCE ACTUALLY -- ACTUAL PUBLISHED PAPERS, BECAUSE THEY WOULD NOT LET US PUBLISH THE RESULTS.

Q. NOW, YOU LEFT THE EMPLOY OF PHILIP MORRIS IN DECEMBER OF '84, ALTHOUGH THE LABORATORY WAS CLOSED IN APRIL OF '84?

A. RIGHT. CORRECT.

Q. FROM THE TIME YOU LEFT

7667

PHILIP MORRIS UP UNTIL TODAY, DID YOU EVER TRY TO PUBLISH OR PRESENT INFORMATION CONCERNING THE WORK YOU HAD DONE ON NICOTINE AND RATS WHILE EMPLOYED AT PHILIP MORRIS?

A. YES. ON SEVERAL OCCASIONS, WE TRIED TO DO THAT. WE EITHER SUBMITTED SOME OF THE RESULTS TO SCIENTIFIC MEETINGS WHERE WE WOULD GO AND DO A PRESENTATION, OR WE SUBMITTED MANUSCRIPTS TO PROFESSIONAL JOURNALS FOR PUBLICATION.

Q. SO DID YOU STOP?

A. AT THAT POINT, WE STOPPED.

Q. NOW, WHEN YOU WERE DESCRIBING THE WORK BEING DONE IN THE RAT LABORATORY AS SECRET, WAS IT ALSO SECRET FROM OTHER DEPARTMENTS AT PHILIP MORRIS IN-HOUSE?

A. WE HAD -- I CAN'T TELL YOU WHAT OTHER DEPARTMENTS KNEW WHAT WE WERE DOING, TO WHAT EXTENT, BUT WE HAD A VERY CLOSED LABORATORY. OUR COLLEAGUES FROM OTHER GROUPS WERE NOT ALLOWED TO COME IN AND TOUR THE LAB. WE DID NOT GIVE PRESENTATIONS TO THE RESEARCH CENTER THE WAY ALL OTHER SCIENTISTS DID. WE HAD A VERY

7668

RESTRICTED CIRCULATION FOR OUR DOCUMENTS. THERE WERE SOME WORDS WE WERE NOT ALLOWED TO USE IN OUR DOCUMENTS. WE WERE NOT ALLOWED CERTAINLY TO BRING OUTSIDE VISITORS IN OUTSIDE THE COMPANY IN TO SEE THE LAB. AND AS I INDICATED, EVEN OUR RATS WERE BROUGHT UP TO THE LAB IN SECRET, UNDER A TOWEL ON A CART, SO THAT PEOPLE COULD NOT SEE THAT THEY WERE THERE.

Q. NOW, IF YOU HAD BEEN PERMITTED

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TO PUBLISH WHAT YOU WANTED TO PUBLISH, WHAT WOULD HAVE BEEN THE FOCUS OF YOUR ARTICLES?

A. WE HAD COMPLETED STUDIES ON SEVERAL AREAS RELATED TO NICOTINE ABUSE. ARTICLES ON NICOTINE SELF-ADMINISTRATION IN RATS. ARTICLES ON NICOTINE TOLERANCE IN RATS. AN ARTICLE ON NICOTINE PHYSICAL DEPENDENCE IN RATS. AND ARTICLES ON BRAIN SITES, WHERE IN THE BRAIN NICOTINE IS ACTING, AGAIN.

Q. IN TERMS OF YOUR WORK IN THE RAT LABORATORY WHILE EMPLOYED AT PHILIP MORRIS, DID YOU EVER REACH A CONCLUSION AS TO WHETHER NICOTINE WAS A POSITIVE REINFORCER FOR RATS?

7669

A. YES. THAT WAS A VERY EARLY CONCLUSION DEMONSTRATED BY THE VERY FIRST SELF-ADMINISTRATION STUDY. UP UNTIL THAT TIME, MOST SELF-ADMINISTRATION STUDIES IN ANIMALS, WITH A VARIETY OF DRUGS, HAD BEEN WELL ESTABLISHED. THE COCAINE, THE HEROINS. THAT SORT OF THING. STUDIES WITH SELF-ADMINISTRATION WITH NICOTINE HAD NOT BEEN AS SUCCESSFUL, AND I THINK WE COMPLETED -- WE DID COMPLETE THE FIRST THOROUGH DEMONSTRATION, AN UNEQUIVOCAL DEMONSTRATION IN RATS THAT NICOTINE FUNCTIONS AS A POSITIVE REINFORCER, WHICH MEANS THE ANIMALS WILL WORK TO GET IT. THEY WILL WORK TO PRESS A LEVER TO GET THE INFUSION OF NICOTINE INTO THEIR BLOODSTREAM.

Q. WHEN A RAT WOULD PRESS A LEVER AND GET THIS INFUSION OF NICOTINE, WAS THERE ANYTHING IMMEDIATELY OBSERVABLE IN THEIR BEHAVIOR, HOW THEY ACTED AFTER THEY GOT THE SHOT?

A. THEY LOOKED QUITE NORMAL, AND THEN USUALLY PROCEEDED A SHORT TIME LATER TO PRESS THE LEVER AGAIN FOR SOME MORE NICOTINE.

7670

Q. IN TERMS OF WRITING UP YOUR REPORTS AND IN TERMS OF LABORATORY DATA, WERE THERE ANY RESTRICTIONS IMPOSED UPON YOU AS TO LANGUAGE YOU COULD USE OR NOT USE IN REFERRING TO YOUR FINDINGS AND REFERRING TO YOUR DATA?

A. WE NEVER USED THE WORD DRUG FOR NICOTINE. WE WERE TOLD NOT TO CALL NICOTINE A DRUG. IT WAS A COMPOUND. WE WERE TOLD TO KEEP IT OUT OF THE REALM OF THE STANDARD DRUGS OF ABUSE; AGAIN, THE COCAINES AND HEROINS.

IN ONE CASE, WE WERE ACTUALLY -- WELL, WROTE DOWN

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"NICOTINE." IT WAS CHANGED TO JUST THE WORD "COMPOUND." AND THE WORD "ADDICTION" WAS CERTAINLY NEVER USED OPENLY OR WRITTEN DOWN.

Q. HOW ABOUT THE WORD "CANCER"?

A. CANCER, WHICH WAS SOMETHING WE DID NOT STUDY -- THERE WAS A WHOLE OTHER GROUP STUDYING IT -- THAT WAS NEVER USED OPENLY. THE WORD FOR CANCER WAS "BIOLOGICAL ACTIVITY."

Q. DURING THE PERIOD OF TIME THAT YOU WERE EMPLOYED IN THE LABORATORY,

7671

I'M SURE -- I ASSUME YOU HAD INTERACTION WITH DR. DE NOBLE JUST ABOUT EVERY DAY?

A. EVERY DAY, WE WORKED VERY CLOSELY TOGETHER.

Q. HOW ABOUT DR. CHARLES?

A. DR. CHARLES, WE HAD A LOT OF INTERACTION. HE WAS OUR IMMEDIATE SUPERVISOR. IF WE DIDN'T SEE HIM DAILY, IT WAS SEVERAL TIMES A WEEK.

Q. AND HOW FREQUENTLY WITH DR. OSDENE?

A. DR. OSDENE WAS DR. CHARLES' BOSS, AND OUR CONTACT WAS LESS FREQUENT, BUT STILL ON A REGULAR BASIS. WEEKLY. SEVERAL TIMES A MONTH, DEPENDING ON HIS SCHEDULE. HE WAS A FREQUENT VISITOR TO THE LAB.

Q. WHEN YOU WERE ACTUALLY EMPLOYED AT PHILIP MORRIS IN THE LABORATORY, DID YOU AND DR. DE NOBLE HAVE SOME OF YOUR ARTICLES PUBLISHED?

A. DR. DE NOBLE HAD ONE ARTICLE PUBLISHED JUST ABOUT THE TIME I GOT THERE.

Q. IN TERMS OF ARTICLES THAT WERE TO BE PUBLISHED, WHO DID YOU OR ANYONE ELSE, THE OTHER SCIENTISTS, HAVE TO

7672

RUN IT BY?

WHO HAD TO GIVE PERMISSION THAT THIS ARTICLE WAS OKAY TO PUBLISH, THIS ARTICLE WASN'T?

A. WELL, IN OUR CASE, AGAIN, WE HAD A VERY RESTRICTED AUDIENCE. ARTICLES FROM OUR LABORATORY WENT -- WENT TO JIM CHARLES, THEN TO TOM OSDENE. THEN THEY WOULD GO TO NEW YORK FOR REVIEW BY FRED NEWMAN, THE ATTORNEY, AND THEN HE WOULD GET FEEDBACK, BACK DOWN THAT CHAIN?

Q. SPECIFICALLY, WHAT RESEARCH WERE YOU PURSUING WITH RESPECT TO NICOTINE AND ACETALDEHYDE IN TERMS OF SELF-ADMINISTRATION OF RATS AT THE TIME THE LABORATORY WAS CLOSED IN APRIL OF '84?

A. THE ACETALDEHYDE WORK WAS FASCINATING. IT WAS A LOT OF INTEREST TO THE COMPANY AND TO OUR CONSULTANT.

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WE WERE ALL VERY INTERESTED IN IT BECAUSE REALLY HERE, FOR THE FIRST TIME, THERE WAS ANOTHER PRODUCT IN CIGARETTE SMOKE THAT WAS IDENTIFIED THAT WOULD -- THAT HAD REINFORCING PROPERTIES.

IN THE RAT, IT WAS CLEARLY

7673

SELF-ADMINISTERED, AND EVEN MORE INTERESTING WHEN YOU PUT ACETALDEHYDE AND NICOTINE TOGETHER IN THE SAME BOTTLE, YOU HAVE GOT AN EFFECT THAT WE CALL SUPERADDICTIVE. THE EFFECT OF THE COMBINED CHEMICALS WAS GREATER THAN THE EFFECT OF THE TWO EFFECTS ALONE IF YOU JUST ADDED THEM TOGETHER. THERE WAS A SYNERGISTIC EFFECT OR A SUPERADDICTIVE EFFECT. SO THE RATES REALLY WORKED HARD TO GET THAT COMBINATION.

ONCE THAT WAS DEMONSTRATED, THERE WERE A -- JUST AS WITH OUR NICOTINE ANALOG MEETINGS -- A SERIES OF DISCUSSIONS ON, COULD THIS NICOTINE, ACETALDEHYDE COMBINATION, WHICH EXISTS ALREADY NATURALLY IN CIGARETTES, BE EXPLOITED AND DEVELOPED AND USED SO THAT WE COULD TRY AND FIND THE OPTIMAL RATIO OF EACH COMPOUND THAT COULD THEN BE TRANSITIONED INTO A COMMERCIAL CIGARETTE.

MR. PIUZE: -97?

MR. GOLDSTEIN: CORRECT.

MR. PIUZE: (READING:)

7674

Q. DR. MELE, I HAD ASKED YOU ABOUT TESTIMONY YOU GAVE BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES ON RESEARCH IN THE TOBACCO INDUSTRY IN APRIL OF 1994.

YOU TESTIFIED BEFORE CONGRESS?

A. CORRECT.

Q. AND DID YOU TESTIFY GENERALLY IN THE SAME KINDS OF AREAS THAT YOU'VE DISCUSSED TODAY?

A. CORRECT.

Q. I'M GOING TO SHOW YOU ENGLE PLAINTIFFS' EXHIBIT NO. 5460, THE TITLE OF WHICH IS, "PHILIP MORRIS USA STATEMENT RESPONDING TO CONGRESSMAN WAXMAN'S PRESS CONFERENCE," MARCH 31, 1994, AND ASK YOU IF YOU'VE SEEN THIS BEFORE.

HAVE YOU SEEN THIS DOCUMENT?

A. YES. YES, I HAVE.

Q. AND WERE YOU AWARE AT THE TIME OF THE RESPONSE, OF COURSE, THE RESPONSE OF PHILIP MORRIS, TO AT LEAST DR. DE NOBLE'S TESTIMONY, AS WELL AS YOUR OWN?

A. I WAS AWARE OF PHILIP MORRIS'

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RESPONSE, YES.
Q. WHICH WAS WHAT, WITH RESPECT
7675
TO YOUR TESTIMONY?

MR. GARDNER: YOUR HONOR, WE JUST NEED A HALF A SECOND.
THE COURT: SURE.

(SHORT PAUSE.)

THE COURT: ARE YOU READY TO GO?
MR. PIUZE: YES.
THE COURT: GREAT.
MR. PIUZE: IT WAS A GOOD STORY.
THE COURT: DO YOU KNOW SOMETHING?
OH, MY HEAVENS.
MR. GARDNER: THIS HAS ALL BEEN FREE?
THE COURT: YEAH.
SHAME ON ME. I'LL GET IT LATER. I'LL GET IT BACK LATER.
MR. PIUZE: NO DOUBT.
(READING:)

Q. DR. MELE, DID PHILIP MORRIS, DURING THE PERIOD OF TIME THAT YOU WERE THERE, HAVE THE SCIENTIFIC TECHNOLOGY TO REMOVE ALL THE NICOTINE FROM A CIGARETTE IF THAT'S WHAT THEY CHOSE TO DO?
A. CORRECT, YES, THEY DID.
7676
Q. AND DID THEY, IN FACT, MAKE CIGARETTES -- SOME CIGARETTES -- I'M NOT TALKING ABOUT COMMERCIAL NECESSARILY, WITHOUT --
A. THEY WOULD MAKE EXPERIMENTAL CIGARETTES, AS REQUESTED BY MR. FRANK RYAN AND BILL DUNN IN THE BEHAVIORAL RESEARCH UNIT. THEY COULD TAKE OUT THE NICOTINE. THEY COULD ADD IN NICOTINE. THEY COULD MANIPULATE THE LEVELS OF NICOTINE. THESE WERE ALL EXPERIMENTAL CIGARETTES THAT WERE USED IN SMOKING STUDIES WITH HUMANS AT THE COMPANY.
Q. YOU HAD TOLD US EARLIER IN YOUR TESTIMONY ABOUT THE GOAL OF THE ANALOG THAT PHILIP MORRIS WAS HOPING TO ACHIEVE WHEN YOU WERE FIRST HIRED.
AT THE TIME THE LABORATORY WAS CLOSED IN APRIL OF '84, FROM A PURELY SCIENTIFIC STANDPOINT, TO YOUR KNOWLEDGE, WAS THAT GOAL ACHIEVED?
A. YES. AN ANALOG HAD BEEN IDENTIFIED THAT MET THE CRITERIA.
Q. THAT MET PHILIP MORRIS' CRITERIA?
A. YES. IN FACT, TWO.
Q. WHICH YOU DISCUSSED ALREADY?
7677
A. YES. THE 2-PRIME METHYLNICOTINE WAS THE BEST ONE, AND

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THE 4-PRIME METHYLNICOTINE WAS NUMBER TWO.

Q. HAVE YOU EVER TESTIFIED IN A COURTROOM BEFORE TODAY?

A. NO.

Q. WHAT ARE YOU CHARGING FOR YOUR TESTIMONY IN THIS CASE?

A. EXPENSES. WHATEVER IT COSTS ME TO GET HERE AND GET HOME.

Q. NOT CHARGING ANYTHING FOR YOUR TIME?

A. NOTHING.

MR. GOLDSTEIN: 18220.

THE COURT: I'M GLAD TO SEE THAT SOMEBODY BESIDES ME HAS A BOSS.

MR. GARDNER: I JUST WANT TO KNOW IF HE'S FREE, YOUR HONOR.

THE COURT: SOMEHOW, I THINK HE COSTS MORE THAN THE EXPENSES TO GET HIM TO AND FROM.

MR. GARDNER: HE AIN'T FREE?

MR. PIUZE: NO.

(READING:)

Q. NOW, DR. MELE, WHEN THE RAT LABORATORY WAS IN OPERATION, FROM THE

7678

TIME YOU WERE FIRST EMPLOYED BY PHILIP MORRIS IN NOVEMBER OF 1981 UNTIL THE LABORATORY WAS CLOSED IN APRIL OF 1984, HAD YOU BEEN PROMOTED WITHIN PHILIP MORRIS?

A. YES.

Q. FROM WHAT TO WHAT?

A. THE TITLE I STARTED OFF WITH WAS CALLED SCIENTIST, AND I WAS PROMOTED TO THE RESEARCH SCIENTIST LEVEL, THE NEXT STEP UP, AFTER A YEAR OR SO.

Q. OKAY. DID PHILIP MORRIS HAVE A SYSTEM IN PLACE WHEREBY YOUR WORK AS A SCIENTIST AND THEN AS A RESEARCH SCIENTIST WAS EVALUATED BY YOUR SUPERIORS?

A. YES. ALL MY WORK WENT UP THROUGH MY CHAIN OF COMMAND. FIRST, DR. DE NOBLE, AND THEN UP THROUGH EITHER DR. DUNN INITIALLY. BUT MOST OF THE TIME, IT WAS DR. JIM CHARLES, AND ULTIMATELY DR. OSDENE.

Q. WHAT KIND OF EVALUATIONS DID YOU RECEIVE DURING THE PERIOD OF TIME THAT YOU WERE EMPLOYED AT PHILIP MORRIS?

A. THEY WERE ALL HIGHLY POSITIVE.

7679

THEY'RE ALL VERY GOOD, VERY POSITIVE. I ALWAYS RECEIVED VERY TOP RATINGS, GOOD RAISES, BONUSES, AND ULTIMATELY THE PROMOTION. SO THERE WAS NEVER ANY DISSATISFACTION WHATSOEVER.

Q. TO YOUR KNOWLEDGE, HAD YOU EVER RECEIVED A NEGATIVE EVALUATION?

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A. NEVER.
Q. NOW, LET ME ASK YOU ABOUT SEVERAL EXHIBITS. ENGLE EXHIBIT NO. 5448, THE TITLE OF WHICH IS, "DEVELOPMENT OF BEHAVIORAL TOLERANCE FOLLOWING CHRONIC NICOTINE ADMINISTRATION."
THIS IS SOMETHING THAT YOU CO-AUTHORED ALONG WITH DR. DE NOBLE; IS THAT CORRECT?
A. CORRECT.
Q. WHAT WAS THE THRUST OF THIS ARTICLE?
A. THIS PAPER LOOKED AT SEVERAL ASPECTS OF TOLERANCE TO NICOTINE. CERTAINLY, TOLERANCE TO NICOTINE HAD BEEN KNOWN UP UNTIL THAT POINT. THE VARIOUS TYPES OF TOLERANCE, I THINK AS WE DISCUSSED LAST WEEK. THIS LOOKED AT TWO PARTICULAR TYPES OF TOLERANCE TO NICOTINE, ONE REFERRING TO BRAIN OR

7680

BEHAVIORAL TOLERANCE AND ONE TO ANOTHER GENERAL, WHAT WE CALL METABOLIC TOLERANCE, THE WAY THE BODY CLEARS NICOTINE OUT OF THE SYSTEM WHEN IT SEES IT REGULARLY.
SO IT SHOWED TWO SEPARATE ASPECTS -- TWO ASPECTS OF TOLERANCE, AND WHAT WE CALL BRAIN TOLERANCE THAT DEVELOPS WHEN THE BODY SEES IT ON A REGULAR BASIS.
Q. IN ACADEMIC OR RESEARCH CIRCLES, IS IT NORMAL FOR A SCIENTIST, SUCH AS YOURSELF, A PH.D., TO WRITE UP YOUR RESEARCH AND THE RESULTS OF YOUR RESEARCH?
A. THAT'S PROBABLY THE MOST BASIC THING YOU DO AS A SCIENTIST. YOU DO YOUR STUDY, YOU WRITE A MANUSCRIPT, AND YOU TRY AND PUBLISH IT.
Q. NOW, WAS PLAINTIFFS' EXHIBIT 5448 EVER PUBLISHED?
A. NO. IT WAS NEVER PUBLISHED.
Q. AND WHAT REASON WERE YOU GIVEN BY YOUR SUPERIORS AT PHILIP MORRIS AS TO WHY IT WAS NOT PUBLISHED?
A. THAT WAS MY FIRST LARGE STUDY AT PHILIP MORRIS. IT TOOK ABOUT A YEAR TO COMPLETE, AND -- IN LATE 1982,

7681

I SUBMITTED IT UP THROUGH THE REVIEW CHAIN FOR APPROVAL FOR PUBLICATION, OR AT LEAST TO SUBMIT IT TO A JOURNAL AND TRY AND GET IT PUBLISHED.
AND DR. CHARLES CAME DOWN TO MY OFFICE ONE DAY AND TOLD ME HE COULD NOT, WOULD NOT APPROVE IT TO GO OUTSIDE OF PHILIP MORRIS. HIS STATEMENT WAS THAT BECAUSE WE WERE DEMONSTRATING TOLERANCE TO NICOTINE, WE WERE THEN DEMONSTRATING THAT NICOTINE WAS A DEPENDENCE-PRODUCING

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SUBSTANCE BASED ON THE DIAGNOSTIC AND STATISTICAL MANUAL OF THE AMERICAN, PSYCHIATRIC ASSOCIATION.

THAT WAS AT THE TIME THEIR DEFINITION OF SUBSTANCE -- THAT WAS AT THAT TIME THEIR DEFINITION OF SUBSTANCE DEPENDENCE. ONE OF THEIR DEFINITIONS WAS -- ONE OF THE CRITERIA FOR SUBSTANCE DEPENDENCE IN THAT VOLUME BY THE AMERICAN PSYCHIATRIC ASSOCIATION WAS TOLERANCE.

SO DR. CHARLES CONCLUDED THAT IF WE'RE SHOWING TOLERANCE IN RATS, WE ARE THEN DEMONSTRATING SUBSTANCE DEPENDENCE TO NICOTINE, AND HE INDICATED THAT WOULD NOT BE ACCEPTABLE

7682

FOR THE COMPANY OR GOOD FOR THE COMPANY TO GO OUT TO THE WORLD.

Q. SO THIS RESEARCH THAT WAS DONE AND WRITTEN UP BY YOU AND DR. DE NOBLE BASICALLY NEVER SAW THE LIGHT OF DAY; IS THAT CORRECT?

A. IT WASN'T UNTIL SEVERAL YEARS LATER, AFTER WE LEFT PHILIP MORRIS -- IT WAS 1986 -- WE SUBMITTED AN ABSTRACT OF THAT, A SHORTER VERSION OF THAT RESEARCH TO A MEETING, THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY. IT WAS A PROFESSIONAL SCIENTIFIC MEETING THAT MEETS EVERY YEAR.

AND WE WENT TO THAT MEETING, AND WE DID NOT -- AND WE DID WHAT'S CALLED A POSTER PRESENTATION. YOU HANG UP THE DATA, YOU HANG IT UP ON A POSTERBOARD, AND PEOPLE WALK BY FOR THREE HOURS AND TALK TO YOU ABOUT IT.

SO WE DID THAT, AND IT WAS SHORTLY AFTER THAT WE STARTED RECEIVING THE LETTERS FROM THE PHILIP MORRIS' LEGAL OFFICE TELLING US NOT TO DO THAT ANYMORE, AND THEN THREATENING LEGAL ACTION IF WE CONTINUED TO DO THIS.

7683

Q. THE OTHER ARTICLE IS ENGLE PLAINTIFFS' NO. 5444, "INTRAVENOUS NICOTINE SELF-ADMINISTRATION IN RATS," BY DRS. MELE AND DE NOBLE.

OKAY. NOW, DR. MELE, AS I SAY, THE TITLE OF 5444 IS, "INTRAVENOUS NICOTINE SELF-ADMINISTRATION IN RATS."

AND WHAT WAS THE FOCUS OF THIS ARTICLE BY YOU AND DR. DE NOBLE?

A. THIS WAS OUR FIRST PAPER ON SELF-ADMINISTRATION OF NICOTINE. THIS IS THE PAPER THAT DEMONSTRATED THAT RATS WILL, INDEED, WORK TO OBTAIN INJECTIONS OF NICOTINE DIRECTLY INTO THE BLOODSTREAM. THAT'S WHERE THEY ARE PRESSING THE LEVER AND OPERATING A

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PUMP WHICH THEN SQUIRTS A SMALL AMOUNT OF THE NICOTINE SOLUTION, YOU KNOW, INTO THE BLOOD.

THIS PAPER DEMONSTRATES REALLY CONCLUSIVELY FOR THE FIRST TIME IN RATS THAT NICOTINE CAN ACT AS A POSITIVE REINFORCER IN A VERY THOROUGH AND COMPLETE STUDY, WHICH WAS REALLY THE MAIN CRITERIA FOR STUDYING DRUG ABUSE AND DRUG DEPENDENCE.

Q. NOW, WAS THIS ARTICLE,

7684

EXHIBIT 5444, "INTRAVENOUS NICOTINE SELF-ADMINISTRATION IN RATS," WAS THIS EVER PUBLISHED?

A. THIS PAPER WAS SUBMITTED TWICE FOR PUBLICATION. IT WAS ACCEPTED TWICE FOR PUBLICATION AND WAS RETRACTED BOTH TIMES.
ONCE WHEN WE WERE STILL WORKING AT PHILIP MORRIS, THEY DID ALLOW THIS. THEY ALLOWED US TO SEND THIS OUT. IT WAS ACCEPTED AT THE JOURNAL OF PSYCHOPHARMACOLOGY, WHICH WAS AND STILL IS ONE OF THE PREEMINENT JOURNALS IN THE FIELD.

IN MID 1983, WE WERE FORCED TO CONTACT THE JOURNAL AND SAY, WE DON'T WISH TO PUBLISH IT, PLEASE TAKE IT BACK.

Q. NOW, THESE TWO OCCURRENCES WHICH HAD ACCEPTED THIS ARTICLE FOR PUBLICATION, WERE THEY PEER-REVIEWED JOURNALS?

A. OH, YES. PSYCHOPHARMACOLOGY IS, AGAIN, ONE OF THE PREEMINENT JOURNALS. IT'S BEEN AROUND FOR QUITE A NUMBER OF YEARS AND HAS A VERY ESTEEMED SET OF REVIEWERS.

Q. OKAY. NOW, AFTER HAVING

7685

RECEIVED THIS LETTER FROM THE ASSISTANT GENERAL COUNSEL OF PHILIP MORRIS, DATED APRIL 23, 1986, DID YOU COMPLY WITH THIS LETTER?

A. NO. WE IGNORED IT. WE FELT IT WAS IMPORTANT ENOUGH TO TRY AND GET SOME MORE OF THE DATA OUT. THIS ONE WAS ALREADY PRESENTED. WE HAD HAD A NUMBER OF OTHER STUDIES ON VARIOUS ASPECTS OF NICOTINE. WE JUST FELT IT WAS CRITICAL THAT THE -- YOU KNOW, THE SCIENTIFIC COMMUNITY AND THE WORLD FIND OUT WHAT WE DID AND WHAT WE FOUND OUT AND ALLOW THEM TO MAKE A DECISION WHETHER THIS WORK WAS IMPORTANT AND USEFUL IN ANY WAY.

SO WE PUT OUT ANOTHER ABSTRACT AND HAD SUBMITTED ANOTHER PAPER FOR PUBLICATION.

Q. OKAY. AND THEN ON SEPTEMBER 10, 1986, AND I'M TALKING ABOUT PLAINTIFFS' EXHIBIT 5430, YOU

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AND DR. DE NOBLE RECEIVED A LETTER, CERTIFIED MAIL, RETURN RECEIPT REQUESTED, AGAIN BY MR. TAUSSIG, THE ASSISTANT GENERAL COUNSEL OF PHILIP MORRIS.

WHAT WAS YOUR RESPONSE TO THIS

7686

LETTER OF SEPTEMBER 10, 1986 FROM THE ASSISTANT GENERAL COUNSEL OF PHILIP MORRIS?

A. WELL, WE ACTUALLY CALLED THE COUNSEL AND DISCUSSED THIS WITH HIM. AND HE WAS VERY EMPHATIC, THAT IF WE WERE TO CONTINUE THIS, THEY WOULD TAKE LEGAL ACTION AGAINST US. BEING TWO INDEPENDENT PEOPLE WITHOUT RESOURCES TO CHALLENGE A COMPANY LIKE PHILIP MORRIS IN ANY LEGAL PROCEEDING, WE THOUGHT IT WAS WISE AT THAT POINT TO STOP PUBLISHING DATA.

Q. YOU BACKED OFF?

A. WE BACKED OFF.

Q. NOW, DR. MELE, ENGLE PLAINTIFFS' EXHIBIT NO. 5446, ARE THESE LIBRARY REQUEST FORMS, AND WE HAD DISCUSSED THIS LAST WEEK, THAT WHEN THERE WAS AN ARTICLE IN THE LITERATURE THAT YOU WERE INTERESTED IN AND IT WAS NOT ON THE PREMISES OF PHILIP MORRIS IN THEIR LIBRARY, YOU HAD THE OPTION OF FILLING OUT ONE OF THESE CARDS AND, WITHIN A RELATIVELY SHORT PERIOD OF TIME, YOU WOULD GET THE ARTICLE; IS THAT CORRECT?

A. THAT IS CORRECT.

7687

Q. WHY DON'T YOU JUST IDENTIFY THESE.

A. THESE ARE THE STANDARD REQUEST FORMS WE PUT IN THROUGH THE LIBRARY THERE. THEY HAD A NICE LIBRARY, A GOOD SELECTION OF JOURNALS, BUT ALL THE JOURNALS WE NEEDED, IF WE NEEDED SOMETHING ELSE, THIS WAS THE MECHANISM FOR GETTING THEM.

Q. OKAY. WHO DID YOU ACTUALLY GIVE THOSE CARDS TO?

A. THE LIBRARIAN.

Q. THERE WAS, IN FACT, A LIBRARIAN AT PHILIP MORRIS?

A. THEY HAD TWO OR THREE. THEY HAD AN ACTUAL LIBRARY THERE, LIKE A SMALL MEDICAL LIBRARY THERE, LIKE ANY HOSPITAL WOULD HAVE, WITH QUITE A COLLECTION OF BOOKS, SCIENTIFIC AND HEALTH-RELATED JOURNALS.

Q. NOW, DR. MELE, I'D LIKE YOU TO LOOK AT THE NEXT PLAINTIFFS' EXHIBIT, WHICH IS 498, A MEMO ON THE STATIONERY OF PHILIP MORRIS, DATED JUNE 18, 1980 FROM L.W. DUNN TO DR. T.S. OSDENE, AND THE SUBJECT IS POSSIBLE RESTRUCTURING OF THE BEHAVIORAL RESEARCH LAB.

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WHAT ESSENTIALLY IS THE THRUST
7688
OF THIS MEMO?
A. THIS MEMO OUTLINES THE BEHAVIORAL RESEARCH GROUP. THERE WERE FOUR COMPONENTS OR SECTIONS OF THIS GROUP.
THE GROUP I WAS IN, THE BEHAVIORAL PHARMACOLOGY PROJECT, WAS HEADED BY VIC DE NOBLE, AND THEN THERE WERE THREE OTHER GROUPS, EXPERIMENTAL NEUROPSYCHOLOGY, EXPERIMENTAL PSYCHOLOGY, SOCIAL PSYCHOLOGY, ALL RUN BY PROFESSIONAL INVESTIGATORS TO STUDY CERTAIN ASPECTS OF SMOKING BEHAVIOR.
Q. NOW, IN TERMS OF -- LOOKING THAT THE DOCUMENT, 498, IN TERMS OF THE BEHAVIORAL PHARMACOLOGY PROJECT, IT SAYS THE OBJECTIVE WAS TO IDENTIFY THE UNIQUE PHARMACOLOGICAL ACTIONS OF NICOTINE AS MANIFESTED IN LOWER-ORDERED MAMMALIAN BEHAVIOR.
IS THAT WHAT YOUR RAT RESEARCH FOCUSED ON?
A. CORRECT. THAT'S ESSENTIALLY A FANCY WAY OF SAYING WE LOOKED AT WHAT NICOTINE DID TO RATS.
THE MAIN -- OR ONE OF THE MAIN THRUSTS OF THE LAB, AGAIN, WAS TO WORK ON THE NICOTINE ANALOG PROGRAM. IT
7689
WAS TO FIND A SUBSTITUTE, A REPLACEMENT COMPOUND, FOR NICOTINE, ONE THAT WOULD HAVE THE SAME EFFECTS IN THE BRAIN AS NICOTINE, ONE THAT WOULD KEEP PEOPLE SMOKING, BUT ONE THAT DID NOT HAVE THE NEGATIVE CARDIOVASCULAR EFFECTS OF NICOTINE, THE ADVERSE EFFECTS ON THE HEART AND BLOOD SYSTEM.
Q. OKAY. NOW, THE NEXT DOCUMENT I'M GOING TO ASK YOU ABOUT, DR. MELE, IS PLAINTIFFS' EXHIBIT NO. 25 ON THE STATIONERY -- INTEROFFICE CORRESPONDENCE ON THE STATIONERY OF PHILIP MORRIS USA FROM J.L. CHARLES TO DR. R.B. SELIGMAN, DATED MARCH 18, 1980.
NOW, REMIND US AGAIN, PLEASE. J.L. CHARLES IS WHO?
A. JIM CHARLES. HE WAS TWO LEVELS ABOVE ME. HE WAS -- VICTOR DE NOBLE WAS MY SUPERVISOR. CHARLES WAS HIS SUPERVISOR. HE WAS THE DIRECTOR OF THE BIOCHEMICAL RESEARCH DIVISION AND EVENTUALLY TOOK OVER FOR TOM OSDENE IN '84 WHEN OSDENE GAVE UP THAT POSITION.
7690
Q. NOW, THE SUBJECT IS NICOTINE RECEPTOR PROGRAM, UNIVERSITY OF ROCHESTER.

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WHAT WAS THE RELATIONSHIP BETWEEN THE UNIVERSITY OF ROCHESTER AND THE NICOTINE RECEPTOR PROGRAM AS IT RELATED TO PHILIP MORRIS RESEARCH?

A. WELL, THIS, AGAIN, REFERS TO THE ANALOG PROGRAM, WHEN WE WERE LOOKING FOR A SUBSTITUTE FOR NICOTINE. OUR CHEMISTS IN-HOUSE WOULD SYNTHESIZE THESE ANALOGS, THESE MOLECULES THAT LOOKED LIKE NICOTINE, AND THEY WERE TESTED IN SEVERAL WAYS.

WE HAD A LARGE COLLABORATION WITH DR. LEO ABOOD AT THE UNIVERSITY OF ROCHESTER IN ROCHESTER, NEW YORK, AND HE DID STUDIES THAT LOOKED AT THE EFFECTS OF THESE ANALOGS ON BRAIN TISSUE, ON TISSUE THAT MEASURED CARDIOVASCULAR EFFECTS. HE WAS A NEUROCHEMIST, NEUROPHARMACOLOGIST, AND HE ESSENTIALLY COMPLEMENTED THE WORK WE DID WITH THE NEUROLOGICAL.

Q. WHEN YOU LOOK AT THE SECOND PAGE, IT'S OBVIOUS TO SEE THAT DR. OSDENE IS RECEIVING A COPY OF THIS MEMO, CORRECT?

7691

A. THAT'S CORRECT.

Q. THE NEXT EXHIBIT IS 5087 AND THE DATE OF THIS IS JUNE 1ST, 1983, AND THE REPORT TITLE SIGNED BY YOU AND DR. DE NOBLE IS, "BEHAVIORAL PHARMACOLOGY," ANNUAL REPORT, 1983.

AND TELL US BASICALLY WHAT THIS DOCUMENT COVERED.

A. THIS WAS ONE OF OUR ANNUAL REPORTS. WE DID THESE EVERY YEAR. WE BASICALLY SUMMARIZED WHAT WE WANTED TO DO, WHAT WE DID DO, AND WHAT WE FOUND OUT. THIS WAS A WAY FOR MANAGEMENT TO KNOW THE KINDS OF STUDIES WE WERE DOING, THE QUESTIONS WE WERE ASKING, AND THE RESULTS WE WERE OBTAINING. MOST OF THE TIME I WAS THERE, THERE WAS A VERY LIMITED DESCRIPTION OF THESE DOCUMENTS. VERY FEW PEOPLE SAW THEM.

IN THIS CASE, BECAUSE IT WAS -- LOOKS LIKE MID TO LATE '83, THE DISTRIBUTION LIST SHOWS THAT IT WAS BEING DISTRIBUTED A LITTLE WIDER THROUGHOUT THE RESEARCH CENTER, AT LEAST TO THE UPPER-LEVEL SCIENTISTS. BUT THIS BASICALLY DESCRIBED WHAT WE DID AND WHAT WE FOUND OUT -- FOUND

7692

OVER A GIVEN YEAR.

Q. OKAY. GO TO PAGE 66. AND THERE IS A HEADING, III ON PAGE 66, NICOTINE ACETALDEHYDE INTERACTIONS, AND THERE'S AN A AND A 1 AND A 2.

I WANT TO ASK YOU A QUESTION ABOUT NO. 2 UNDER THAT TITLE, WHICH SAYS, "THE OPTIMAL COMBINATIONS OF

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NICOTINE AND ACETALDEHYDE THAT RESULTED IN ENHANCED POSITIVE REINFORCING EFFECTS APPEAR TO BE LOW DOSES OF NICOTINE ADDED TO ACETALDEHYDE.

IN NONTECHNICAL TERMS, WHAT ARE YOU SAYING THERE?

A. THERE WAS PART OF OUR STUDIES THAT WERE LOOKING AT NICOTINE, ACETALDEHYDE COMBINATIONS. BOTH NICOTINE AND ACETALDEHYDE EXIST IN STREET SMOKE, AND WE DETERMINED EARLIER THAT ACETALDEHYDE ITSELF CAN FUNCTION AS A POSITIVE REINFORCER FOR RATS.

AND IF YOU PUT THE TWO TOGETHER, YOU HAVE WHAT WE CALL SYNERGISTIC OR SUPERADDICTIVE EFFECT, WHERE WITH BOTH COMPOUNDS TOGETHER, THE RAT WOULD WORK HARDER FOR IT THAN

7693

EITHER COMPOUND ALONE. AND WE WERE ASKED TO DETERMINE IF WE COULD IDENTIFY OPTIONAL RATIOS AND OPTIMAL COMBINATION OF THE TWO DRUGS THAT WOULD PRODUCE THE GREATEST AMOUNT OF RESPONDING ON THE PART OF THE RATS.

Q. AND WHEN YOU GO TO PAGE 68, IT MENTIONS ELECTROENCEPHALOGRAPHIC ANALYSIS.

SO YOU DID THESE BRAIN WAVE TESTS ON RATS?

A. CORRECT.

Q. AGAIN, WHAT WERE THE ELECTROENCEPHALOGRAPH RESULTS, GENERALLY SPEAKING, IN A NONTECHNICAL WAY, WHEN THE RATS WERE SELF-ADMINISTRATING BOTH NICOTINE AND ACETALDEHYDE?

A. WELL, IN THESE STUDIES, WE WERE ACTUALLY JUST GIVING THE COMPOUNDS TO A RAT. THESE RATS WERE ANESTHETIZED ON THE TABLE, AND WE WERE MEASURING THEIR -- THEIR BRAIN ACTIVITY.

AND AGAIN, WE FOUND IF WE GAVE TWO COMPOUNDS TOGETHER, THEY INTERACTED TO PRODUCE CHANGES IN THE HIPPOCAMPUS. IT'S A LARGE AREA OF THE

7694

BRAIN THAT DIFFERED FROM THE EFFECTS OF EACH COMPOUND ALONE.

SO IF THE -- AT THE BRAIN LEVEL, THE TWO DRUGS WERE WORKING TOGETHER TO PRODUCE EFFECTS THAT YOU DIDN'T FIND WITH EITHER DRUG ALONE.

SO IT PROVIDED SOME BRAIN SUPPORT FOR THE BEHAVIOR WE WERE MEASURING IN THE SELF-ADMINISTRATION STUDIES.

Q. NOW, THE NEXT EXHIBIT I WANT TO ASK YOU ABOUT IS PLAINTIFFS' EXHIBIT NO. 5453.

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NOW, THIS IS A MEMO FROM YOU AND DR. DE NOBLE TO DR. DUNN, APRIL 21, 1982. AND I GUESS, AGAIN, THIS IS, WHAT, YOUR ANNUAL REPORT?

A. YES, THIS IS AN ANNUAL REPORT. AGAIN, THESE ARE DONE EVERY YEAR. THERE WERE OFTEN A LOT OF SMALL MEMOS DURING THE YEAR, BUT EVERY YEAR, WE SUMMARIZED AGAIN WHAT WE WERE DOING, WHAT WE WANTED TO DO, WHAT WE WERE FINDING, SO THE COMPANY WAS AWARE AT ALL TIMES OF OUR ACTIVITIES AND THE RESULTS.

Q. ON PAGE 16 OF THIS DOCUMENT, DR. MELE, THERE'S A HEADING CALLED,

7695

"RESULTS." AND IT SAYS, "THE RESULTS SHOW THAT ACETALDEHYDE READILY PERMEATES THE BLOOD-BRAIN BARRIER."

WHAT DOES THAT MEAN?

A. THAT MEANS IF YOU INJECT ACETALDEHYDE INTO A VEIN, THE SAME VEINS WE WERE USING WHEN WE WERE DOING THE SELF-ADMINISTRATION STUDIES OR IN SOME CASES WE LOOKED AT TAIL VEINS. BUT WHEN YOU INJECT IT RIGHT INTO THE BLOODSTREAM, IT PASSES THE BLOOD-BRAIN BARRIER AND GETS INTO THE BRAIN.

THE BLOOD-BRAIN BARRIER IS A SERIES OF TIGHTLY GROUPED-TOGETHER CAPILLARIES, SMALL BLOOD VESSELS THAT TRY TO KEEP OUT THINGS THAT DO NOT BELONG IN THE BRAIN, THINGS -- THINGS YOU FIND IN YOUR PERIPHERAL BLOOD SYSTEM. BUT ACETALDEHYDE CROSSES THAT BARRIER, GETS INTO THE BRAIN, AND THESE STUDIES AT ROCHESTER IDENTIFIED THAT.

Q. AND THE SIGNIFICANCE OF A SUBSTANCE THAT IS ABLE TO CROSS THE BLOOD-BRAIN BARRIER IS WHAT?

A. WELL, IT SHOWS THAT IT CAN GET INTO THE BRAIN. AND IF IT CAN GET INTO THE BRAIN, IT CAN ALTER THE

7696

BRAIN.

IN A CASE WHERE YOU HAVE AN ANIMAL SELF-ADMINISTERING A DRUG, THE BASIS FOR ALL DRUG SELF-ADMINISTRATION IS CHANGES IN BRAIN OR BRAIN ACTIVITY, AND THIS JUST CONFIRMED THAT ACETALDEHYDE DOES, INDEED, GET INTO THE BRAIN AS A BASIS FOR THE SELF-ADMINISTRATION.

Q. WHEN YOU TALK ABOUT THE CONCEPT OF BEHAVIOR AND DRUGS WHICH MIGHT ALTER BEHAVIOR, IS THERE ANY PART OF THE BODY, OF EITHER A RAT OR A HUMAN BEING, WHICH IMPACTS AND AFFECTS BEHAVIOR, OTHER THAN THE BRAIN?

A. WELL, THEORETICALLY, YES. YOU COULD PARALYZE AN ANNUAL WITH CURARE. THEN HE WON'T RESPOND VERY WELL

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BECAUSE HE CAN'T MOVE. YOU CAN MAKE AN ANIMAL VERY SICK AND ILL IN HIS GI TRACT, AND THEN IT BECOMES VERY OBVIOUS WHEN ANIMALS LIKE THAT, AND THEY MAY NOT RESPOND VERY WELL.

BUT FOR ANY DRUG OF ABUSE, THE LOCATIONS INVARIABLY HAVE ALWAYS BEEN FOUND TO BE ACTIVITY IN THE BRAIN.

Q. THE NEXT DOCUMENT, PLAINTIFFS' EXHIBIT 5335, AND THIS IS ACTUALLY A

7697

MEMO FROM DR. DE NOBLE TO DR. CHARLES IN JULY OF 1982 WHERE, AMONG OTHER OBJECTIVES RECITED IS -- HE SAYS, NUMBER ONE, TO DEVELOP A BEHAVIORAL PROFILE OF THE REINFORCING EFFECTS OF NICOTINE AND ACETALDEHYDE, AND A, UNDER NO. 1 IS, DEFINE A RATIO OR RATIOS OF ACETALDEHYDE TO NICOTINE THAT WILL HAVE OPTIMAL REINFORCING EFFECTS; AND B IS, TO EXAMINE THE POTENTIAL PHYSICAL DEPENDENCE-PRODUCING PROPERTIES OF ACETALDEHYDE.

SO PUT IN THAT A FRAMEWORK THAT WE CAN ALL UNDERSTAND, PLEASE.

A. THESE JUST OUTLINED A SERIES OF STUDIES WE WERE DOING WITH THE NICOTINE, ACETALDEHYDE COMBINATIONS, AGAIN, TO IDENTIFY HOW NICOTINE AND ACETALDEHYDE INTERACT TO PROMOTE MORE SELF-ADMINISTRATION BEHAVIOR ON THE PART OF THE RAT TO DETERMINE WHETHER THERE WAS PHYSICAL DEPENDENCE-PRODUCING EFFECT OR A WITHDRAWAL EFFECT OF THESE COMBINATIONS, WHICH WAS ASKED FOR BY THE COMPANY. AGAIN, WITH THE VERY IDEA THAT THIS WAS VERY EXCITING DATA.

7698

THIS WAS A VERY HOT TOPIC AT THE RESEARCH CENTER.

Q. AND, DR. MELE, THEN THE NEXT EXHIBIT IS PLAINTIFFS' EXHIBIT 5447. THIS IS, APPARENTLY, ANOTHER ARTICLE THAT YOU AND DR. DE NOBLE DID, THE TITLE OF WHICH IS, "NICOTINE IS A POSITIVE REINFORCER FOR RATS: EFFECTS OF INSTITUTION DOSE AND FIXED RATIO SIZES."

SO, FIRST OF ALL, TELL US WHAT THAT TITLE MEANS AND WHAT THE FOCUS OF THE RESEARCH WAS.

A. THIS COVERED SOME OF THE EARLY SELF-ADMINISTRATION RESULTS WITH THE RATS. ONE OF THE THINGS YOU DO WHEN YOU HAVE ANIMALS SELF-ADMINISTRATING A DRUG, YOU WANT TO KNOW THE EFFECT OF DOSE. LIKE ANY DRUG, DOSE IS CRITICAL. TOO LITTLE DOESN'T DO ANYTHING; TOO MUCH, IT CAN BE TOXIC OR HAVE ADVERSE EFFECTS. AND SOMEWHERE IN THE MIDDLE IS YOUR OPTIMAL DOSE.

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SO THIS WAS, AGAIN, ONE OF THE EARLY STUDIES TO TRY AND DETERMINE WHICH DOSE THE RATS LIKED THE MOST OF NICOTINE AND TO SEE HOW MUCH RESPONDING WE COULD GET OUT OF THEM AT

7699

THAT DOSE.

FIXED RATIO SIZE WAS A WAY TO LOOK AT HOW HARD THE RAT WOULD WORK TO GET THE NICOTINE, HOW MANY TIMES HE WOULD PRESS THE LEVER TO GET ONE INFUSION.

Q. AND WAS THIS ARTICLE EVER PUBLISHED?

A. THIS ARTICLE ULTIMATELY EVOLVED INTO ONE OF THE OTHER ONES YOU SHOWED ME, THE SELF-ADMINISTRATION. AGAIN, THIS WAS ACCEPTED TWICE AND RETRACTED TWICE ON --

Q. I'M NOT SURE IF I DID THIS ALREADY. PLAINTIFFS' EXHIBIT 5451, "NICOTINE TITRATION HYPOTHESIS REVIEW," PRINTED IN PSYCHOLOGY BULLETIN, DATED JUNE 6TH, 1983 FROM DR. W.L. DUNN, WHO CIRCULATED IT TO A NUMBER OF PEOPLE, INCLUDING YOURSELF.

SO WHY DON'T YOU TAKE A LOOK AT THAT AND TELL US WHAT IT IS.

A. YEAH. THIS IS AN ARTICLE THAT APPEARED IN THE PSYCHOLOGICAL BULLETIN, ONE OF THE -- PROBABLY THE TOP JOURNAL THEN, AND EVEN NOW, ON A LOT OF ASPECTS OF BEHAVIOR, INCLUDING DRUG ADDICTION.

7700

BILL DUNN, EARLY ON, WHEN I GOT THERE, AS I MENTIONED, AS THE HEAD OF THE BEHAVIORAL RESEARCH UNIT, HE WOULD REGULARLY SCOUR THE LITERATURE, FIND RELEVANT ARTICLES AND CIRCULATE THEM AROUND THE RESEARCH CENTER.

IN THIS CASE, IT LOOKS LIKE IT WENT UP TO THE VICE-PRESIDENT, LAWYER MAX HAUSERMANN, AND ALL THE DIRECTORS, BILL FARONE, OSDENE AND THOSE GUYS. SO DUNN, BASICALLY, WAS CIRCULATING, ON A REGULAR BASIS, ARTICLES, CURRENT LITERATURE ON THE QUESTION OF NICOTINE AND ADDICTION AND HOW IT'S BEING STUDIED AND THE IMPLICATIONS, AND THAT SORT OF THING. SO HE WAS KEEPING PEOPLE UP WITH THE LATEST SCIENTIFIC RESULTS.

Q. DR. MELE, WHEN YOU TESTIFIED LAST WEEK, YOU DESCRIBED FOR THE JURY AN INSTANCE WHERE THE PRESIDENT OF PHILIP MORRIS CAME DOWN FROM NEW YORK, ALONG WITH A LAWYER FOR PHILIP MORRIS, TO WALK THROUGH THE LAB AND GO THROUGH THE LABORATORY.

NOW, DID THERE COME A TIME WHEN SOMEONE FROM -- AN EXECUTIVE FROM PHILIP MORRIS NAMED JIM REMINGTON

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7701

INSPECTED THE JOB?

A. YES. MR. JIM REMINGTON WAS -- HE WAS LOCATED IN RICHMOND. HIS TITLE WAS, I BELIEVE, DIRECTOR OF OPERATION SUPPORT.

THERE WERE THREE COMPONENTS IN RICHMOND, THE RESEARCH CENTER, THE OPERATIONS CENTER AND THE MANUFACTURING CENTER. HE WAS CONSIDERED A VIP. YOU KNOW, HE WAS TALKED ABOUT FREQUENTLY, AND ONE DAY, JIM CHARLES BROUGHT HIM INTO OUR LAB FOR A PRIVATE TOUR.

HE SAW THE RATS SELF-ADMINISTERING NICOTINE. HE GOT A QUICK DISCUSSION OF WHAT WE WERE DOING, AND WE PROCEEDED TO HAVE A DISCUSSION ON -- JIM CHARLES WAS TRYING TO MAKE SOME FINER POINTS, TECHNICAL POINTS, ON DRUG ABUSE, ESPECIALLY AS IT RELATES TO CIGARETTE SMOKING --

Q. OKAY. YOU WERE DESCRIBING A SITUATION WHERE JIM REMINGTON WAS GETTING THE VIP TOUR AND WHERE THERE WAS A DISCUSSION.

AND WHAT WAS THE DISCUSSION ABOUT?

7702

A. WELL, AGAIN, WE WERE GIVING HIM A TOUR OF OUR WORK AND TELLING HIM WHAT WE DID AND WHAT WE FELT IT MEANT, AND JIM CHARLES WAS MAKING SOME SUBTLE POINT OF CIGARETTE SMOKING AS IT RELATES TO DRUG ABUSE. AND JIM REMINGTON JUST STOPPED HIM IN HIS TRACKS, INTERRUPTED HIM, AND SAID SOMETHING TO THE EFFECT OF, WE ALL KNOW IT'S ADDICTING. IT'S ADDICTING AS HELL.

Q. DON'T TELL US WHAT HE SAID ABOUT HIS PERSONAL SITUATION. JUST TELL US WHAT HE SAID -- IF HE SAID ANYTHING MORE GENERALLY ON THE SUBJECT OF, WE ALL KNOW IT'S ADDICTING.

A. WELL, AGAIN, HE SAID, WE KNOW IT'S ADDICTING, IT'S ADDICTING AS HELL, AND OUR REAL CONCERN IS STOPPING THESE ANTI-SMOKING PEOPLE OUTSIDE THE GATES FROM MAKING THESE KINDS OF ARGUMENTS.

Q. NOW, YOU SAY JIM REMINGTON WAS TALKED ABOUT AND HE WAS GETTING THE VIP TOUR.

WHAT WAS YOUR UNDERSTANDING OF HIS POSITION WITH PHILIP MORRIS?

A. WELL, HE WAS -- OTHER THAN A

7703

HIGH-LEVEL EXECUTIVE -- THERE ARE MANY OF THOSE -- WE DIDN'T SEE MANY. NOT MANY COME TO OUR LAB. THOSE THAT THEY BROUGHT IN, THEY BROUGHT IN FOR A

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REASON, TO TRY TO SHOW THEM WHAT WE WERE DOING.

HE WAS A HIGH-LEVEL PERSON. HE WAS AN EXAMPLE OF ONE OF THE FEW VIPS THAT CAME TO THE LAB AND GOT A DIRECT TOUR AND DISCUSSION OF WHAT WE DID.

MR. PIUZE: -260?

MR. GOLDSTEIN: CORRECT. LINE 17 AND 18, PLEASE.

MR. PIUZE: THOSE ARE HISTORY.

MR. GOLDSTEIN: OKAY. GOT YOU.

MR. PIUZE: -280.

MR. GOLDSTEIN: 18280 IS THE BEGINNING OF THE CROSS-EXAMINATION.

MR. PIUZE: THAT MEANS SOME OTHER LAWYERS GET TO ASK THE QUESTIONS.

MR. GOLDSTEIN: YES, SIR.

THE COURT: MR. GARDNER IS GOING TO BE THAT OTHER PERSON.

(MR. PAUL MELE'S DEPOSITION WAS READ BY THE DEFENDANTS, BY MR. GARDNER AND MR. GOLDSTEIN,

7704

AND REPORTED AS FOLLOWS:)

MR. GARDNER: (READING:)

Q. GOOD AFTERNOON, DR. MELE.

DOCTOR, MY NAME IS BOB HEIM. I REPRESENT PHILIP MORRIS, AND I'M GOING TO TRY TO BRING US A LITTLE BIT TO SOME OF YOUR TESTIMONY, I THINK IT WAS LAST TUESDAY, AND I'M GOING TO BE ASKING YOU QUESTIONS PRINCIPALLY ABOUT WHAT YOU DID WHILE YOU WERE AT PHILIP MORRIS AND THE RESULTS OF YOUR RESEARCH WHILE YOU WERE THERE.

OKAY?

A. OKAY.

Q. NOW, YOU WORKED IN THE -- I THINK WE ALL REMEMBER -- YOU WORKED IN THE BEHAVIORAL PHARMACOLOGY LABORATORY AT THE R&D CENTER IN RICHMOND, RIGHT?

A. CORRECT.

Q. AND R&D IS RESEARCH AND DEVELOPMENT CENTER?

A. CORRECT.

Q. OKAY. AND AS I RECALL WHAT YOU SAID, YOU WORKED FOR -- WITH AND FOR DR. DE NOBLE WHO WAS -- WHO WAS YOUR PROJECT LEADER?

7705

A. THAT'S CORRECT, RIGHT.

Q. OKAY. AND HE, DR. DE NOBLE, REPORTED TO DR. CHARLES?

A. UH-HUH.

Q. AND DR. CHARLES REPORTED ON UP TO DR. OSDENE; IS THAT RIGHT?

A. CORRECT.

Q. OKAY. AND THEN I GUESS DR. OSDENE REPORTED TO DR. HAUSERMANN?

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A. RIGHT. THE VICE-PRESIDENT.
Q. RIGHT. SO THERE WERE A WHOLE BUNCH OF DIFFERENT LEVELS AT THE R&D CENTER, AND THAT ESSENTIALLY WAS THE REPORTING STRUCTURE OF THE LINE?
A. PRESUMABLY, RIGHT.
Q. OKAY. AS FAR AS YOU KNEW?
A. YES.
Q. ALL RIGHT. AND THE RESEARCH AND DEVELOPMENT DEPARTMENT IN RICHMOND IS ONE OF A NUMBER OF DEPARTMENTS IN THE WHOLE COMPANY, RIGHT?
A. THAT IS CORRECT.
Q. OKAY. NOW, YOUR DEGREE WAS IN EXPERIMENTAL PSYCHOLOGY AND YOUR SPECIALTY WAS IN BEHAVIORAL PHARMACOLOGY?
A. CORRECT.
Q. AND YOUR JOB WORKING WITH

7706

DR. DE NOBLE WAS TO LOOK AT THE EFFECTS OF CERTAIN DRUGS AND COMPOUNDS IN RATS AND THE BRAINS OF RATS?
A. CORRECT.
Q. OKAY. AND THOSE RAT -- THOSE STUDIES WITH RATS, THE CENTERPIECE OF THOSE STUDIES WITH RATS, WERE WHAT YOU'VE DESCRIBED AS THE SELF-ADMINISTRATION STUDIES, WERE THEY NOT?
A. THEY WERE, YES. A MAJORITY OF OUR TIME WAS SPENT ON THOSE.
Q. OKAY.
A. OR MUCH OF OUR TIME.
Q. AND THE BASIC IDEA WAS TO UNDERSTAND HOW NICOTINE OR OTHER -- SOME OTHER COMPOUNDS, ACETALDEHYDE, FOR EXAMPLE, HOW IT AFFECTED THE BRAINS AND THE BEHAVIOR OF RATS?
A. CORRECT. NICOTINE AND ACETALDEHYDE AND SOME OF THE OTHER DRUGS WE LOOKED AT.
Q. AND SOME OTHERS, RIGHT.
AND YOU WOULD DO THESE STUDIES AND DO THE RESEARCH, LIKE SCIENTIST -- LIKE A GOOD SCIENTIST WOULD, AND YOU WOULD REPORT THE

7707

RESULTS, AND THE RESULTS WOULD GET REPORTED UP THE CHAIN SOMEWHERE, RIGHT?
A. CORRECT.
Q. OKAY. NOW, I WANT TO START, AND WHAT I'LL TRY TO DO, DOCTOR, IS -- SO THAT WE'RE TALKING ABOUT THE SAME THING, IF I'M SHIFTING TO A DIFFERENT SUBJECT, I'LL LET YOU KNOW.
A. OKAY.
Q. SO YOU CAN KIND OF READ JUST AS WE DO THIS. BUT I WANT TO START WITH NICOTINE AND SELF-ADMINISTRATION OF NICOTINE, AND I'M CONCERNED THAT

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DETERMINING WHETHER OR NOT NICOTINE WAS ADDICTIVE WAS NOT THE PURPOSE OF THE BEHAVIORAL PHARMACOLOGY LAB.

A. THAT IS CORRECT. NOBODY -- OUR GOAL WAS NOT TO PROVE OR DISPROVE ADDICTION. OUR GOAL WAS TO FIND COMPOUNDS THAT WOULD SUBSTITUTE FOR NICOTINE BECAUSE THE QUESTION OF ADDICTION OR DEPENDENCE WAS NEVER IN DOUBT --

Q. OKAY.

A. -- TO MY UNDERSTANDING.

Q. SO YOUR JOB -- YOU WEREN'T LOOKING AT WHETHER NICOTINE WAS

7708

ADDICTIVE IN CONNECTION WITH THE ANALOG PROGRAM. YOU WERE LOOKING AT ISSUES, WITH REGARD TO, FOR EXAMPLE, WHETHER IT WOULD MEET THE GOALS -- THE TWO GOALS THAT YOU TESTIFIED BEFORE OF THE ANALOG PROGRAM, MAINTAINING THE PHYSIOLOGICAL EFFECT AND REDUCING ANY CARDIOVASCULAR CONCERNS, RIGHT?

A. THOSE WERE THE PRIMARY GOALS. THOUGH, TO FULLY CHARACTERIZE AN ANALOG, WHICH WAS PART OF OUR JOB, WE WERE TRYING TO FULLY CHARACTERIZE THE EFFECTS OF NICOTINE. THERE WERE STUDIES WE RAN OTHER THAN THE SELF-ADMINISTRATION TO GET A BROAD VIEW OF WHAT ANY SINGLE PARTICULAR DRUG WOULD LOOK LIKE.

Q. NOW, ONE OF THE IMPORTANT THINGS YOU WERE LOOKING AT WAS TO SEE WHETHER NICOTINE WAS A POSITIVE REINFORCER, CORRECT?

A. THAT IS CORRECT.

Q. OKAY. AND THE WAY YOU DID THAT WOULD BE TO LOOK TO SEE WHETHER RATS WOULD SELF-ADMINISTER THE NICOTINE, WHETHER THEY WOULD WORK TO GET THE NICOTINE, CORRECT?

A. THAT IS CORRECT.

7709

Q. NOW, THERE HAD BEEN SOME STUDIES DONE BEFORE YOURS BY RESEARCHERS OUTSIDE THE TOBACCO COMPANIES ON SELF-ADMINISTRATION OF NICOTINE BY RATS, OR IN RATS, BUT I THINK YOU SAID THAT THEY WEREN'T AS COMPLETE OR AS THOROUGH AS YOURS. WOULD THAT BE A FAIR CHARACTERIZATION?

A. THAT IS CORRECT. THERE WERE CERTAIN CHARACTERISTICS OF THOSE STUDIES AND CERTAIN CONTROLS THAT WE FELT NEEDED TO BE DONE UNEQUIVOCALLY TO SHOW IN RATS.

Q. OKAY. THOSE STUDIES DID CONCLUDE THAT THERE WERE -- THAT THERE WAS POSITIVE REINFORCEMENT, DIDN'T THEY?

A. I'D HAVE TO SEE THOSE PAPERS. THEY MIGHT HAVE.

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Q. OKAY. DO YOU REMEMBER SOME WORK THAT WAS DONE BY SOME AUSTRALIAN SCIENTISTS?
A. YES.
Q. OKAY. AND THOSE SCIENTISTS HAD CONCLUDED THAT NICOTINE WAS A POSITIVE REINFORCER IN RATS?
A. RIGHT. THAT'S CORRECT.
Q. OKAY. NOW, WAS ONE OF

7710

THE -- WAS ONE OF YOUR CONCERNS ABOUT THOSE OTHER STUDIES, EVEN THOUGH THEY HAD SHOWED THAT NICOTINE WAS A POSITIVE REINFORCER, THAT THEY -- THAT THEY DIDN'T DEAL WITH FOOD ADMINISTRATION IN THE WAY THAT YOU DEALT WITH IT?
A. IN ORDER FOR THOSE STUDIES TO GET THEIR RATS TO SELF-ADMINISTER NICOTINE, THEY HAD TO CONCURRENTLY PROVIDE FOOD REINFORCEMENT TO THE ANIMAL OVER -- WHEN THE ANIMAL WAS WORKING, HE WAS REALLY WORKING FOR TWO THINGS. AND THE ONLY WAY YOU CAN TELL WHAT HE'S ACTUALLY WORKING FOR IS TO PULL ONE OR THE OTHER OUT. AND WHEN THE FOOD WAS ELIMINATED, THE RATS STOPPED WORKING FOR THE NICOTINE.
SO THEY MAY HAVE CONCLUDED NICOTINE WAS A POSITIVE REINFORCER IN THOSE STUDIES. THAT WOULD HAVE MET THE USUAL CRITERIA OF THE COMMUNITY.
Q. NOW, WERE YOU AWARE OF ANY STUDIES BY OUTSIDE RESEARCHERS, SUCH AS THE AUSTRALIAN RESEARCHERS, BEFORE YOURS, THAT RATS WILL SELF-ADMINISTER NICOTINE, EVEN WITHOUT A FOOD ADMINISTRATION SCHEDULE?

7711

A. THERE WERE ATTEMPTS TO SHOW THAT. ONE STUDY BY A RESEARCHER, I BELIEVE HIS NAME WAS HANSON, HAD SOME SELF-ADMINISTRATION OF NICOTINE, BUT IT DIDN'T SEEM TO -- THE SELF-ADMINISTRATION DIDN'T VARY WHEN HE SUBSTITUTED SALINE FOR NICOTINE, WHICH IS ANOTHER VERY CRITICAL POINT. A RAT IS GOING TO PRESS A LEVER AT SOME LOW LEVEL FOR BOTH A DRUG AND A VEHICLE. THAT CERTAINLY DOESN'T CONFIRM THAT HE'S RESPONDING TO THE DRUG.
Q. WERE YOU AWARE OF ANY OTHER STUDIES THAT SHOWED, AGAIN BY PEOPLE WHO WERE LOOKING AT THIS SUBJECT OUTSIDE THE TOBACCO COMPANIES, AND I MEAN BEFORE YOU DID YOUR WORK, THAT SHOWED THAT NICOTINE WAS A POSITIVE REINFORCER EVEN WITHOUT REGARD TO FOOD ADMINISTRATION?
A. THERE WERE -- THERE WERE OTHER STUDIES. AGAIN, NONE OF THESE STUDIES, IN OUR VIEW, UNEQUIVOCALLY

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SHOWED IT WAS A POSITIVE REINFORCER BECAUSE THEY DIDN'T RUN THROUGH THE NUMBER OF ADEQUATE AND NECESSARY CONTROL PROCEDURES TO DEMONSTRATE YOU

7712

COULD MANIPULATE NICOTINE SELF-ADMINISTRATION IN THE RAT. YOU COULD INCREASE IT OR DECREASE IT BY YOUR EXPERIMENTAL CONTROL.

Q. OKAY. SO WHAT YOU'RE SAYING IS THAT WHILE THERE WERE OUTSIDE RESEARCHERS THAT WERE LOOKING AT THIS ISSUE OF NICOTINE BEING SELF-ADMINISTERED BY RATS AND CONCLUDING THAT THEY -- THAT NICOTINE WAS A POSITIVE REINFORCER, THE STUDIES WEREN'T DONE SUFFICIENTLY CAREFULLY OR DIDN'T HAVE SUFFICIENT CONTROLS, OR AT LEAST -- THEY WEREN'T AS GOOD AS YOURS IN THAT REGARD?

A. I CAN'T EVEN SAY THEY CONCLUDED. I'D HAVE TO SEE THOSE. IN CASES WHERE YOU CAN'T SHOW THAT TYPE OF MANIPULATION AND DEMONSTRATION, THE CONSERVATIVE REASONABLE RESPONSE WOULD BE, WE'RE NOT MANIPULATING THIS TREATMENT AS WE SHOULD AND FURTHER STUDIES ARE WARRANTED. THERE'S CLEARLY NOT A GOOD UNDERSTANDING THAT THERE ARE VARIABLES -- VARIABLES THAT CONTROL NICOTINE SELF-ADMINISTRATION IN A RAT. UP UNTIL THAT POINT, THERE WAS NOT A

7713

GOOD UNDERSTANDING IN THE LITERATURE.

Q. OKAY. NOW, THE FACT THAT THIS DRUG OR A COMPOUND IS A POSITIVE REINFORCER DOESN'T NECESSARILY MEAN IT'S ADDICTIVE, DOES IT?

A. NO, IT DOES NOT. I DON'T KNOW IF YOU CAN EVER DEMONSTRATE ADDICTION IN A RAT. A RAT IS A RAT. ADDICTION IS A PARTICULARLY HUMAN QUALITY.

BUT IF A RAT WILL SELF-ADMINISTER A DRUG, A HUMAN WILL SELF-ADMINISTER A DRUG. THERE'S NO DRUG THAT I AM AWARE OF THAT A RAT SELF-ADMINISTERS AND HUMANS DON'T.

ONCE YOU HAVE SELF-ADMINISTRATION, ESPECIALLY IF IT'S A NONMEDICAL USE FOR THAT DRUG, BY DEFINITION, THAT'S DRUG ABUSE. AND THEN, AS THE FREQUENCY AND COMPULSIVENESS OF THAT USE EXPAND, YOU GET INTO DRUG DEPENDENCE AND ADDICTION IN PEOPLE.

Q. RIGHT.

A. BUT IT'S CERTAINLY A PREDICTION THAT THE COMPOUND IS LIKELY TO BE ABUSED.

WHAT I'M GETTING AT IS, RATS AREN'T PEOPLE. WE ALL KNOW THAT,

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RIGHT?

BUT IF YOU SAY POSITIVE REINFORCEMENT IS A FEATURE, A CHARACTERISTIC OF ADDICTION, IF YOU SET THAT IN HUMANS, THEN YOU CAN SEE WHETHER POSITIVE REINFORCEMENT TAKES PLACE IN RATS, AND THEN YOU CAN SAY THAT'S PREDICTIVE OF HUMANS, RIGHT?

MR. GARDNER: YOU READ MY PART. THAT'S OKAY. YOU CAN ANSWER YOUR QUESTION.

MR. GOLDSTEIN: IT WAS AN EXCELLENT QUESTION.

MR. GARDNER: I KEPT WONDERING WHY THE WITNESS WAS ASKING ME QUESTIONS.

MR. GOLDSTEIN: "CORRECT."

MR. GARDNER: OKAY. BACK TO ME, RIGHT?

MR. GOLDSTEIN: YES, SIR.

MR. GARDNER: (READING:)

Q. OKAY. AND YOU CAN DO THAT WITH OTHER THINGS AS WELL. FOR EXAMPLE, IF YOU SET UP AS YOUR HYPOTHESIS THAT PHYSICAL DEPENDENCE IS A CRITERIA FOR ADDICTION, THEN YOU CAN LOOK TO SEE WHETHER THERE IS A PHYSIOLOGICAL DEPENDENCE FOR NICOTINE IN RATS, AND THERE EITHER IS OR THERE ISN'T, RIGHT?

7715

A. WHEN YOU SAY THERE IS OR THERE ISN'T, WITH ADEQUATE TEST ASKING EVALUATION, YES.

Q. OKAY.

A. I MEAN, AT SOME POINT, YOU WOULD, WITH ENOUGH STUDIES AND ENOUGH MANIPULATIONS, YOU WOULD REACH A CONCLUSION ONE WAY OR THE OTHER.

Q. YOU WOULD CONCLUDE THAT THERE -- EITHER THAT THERE EITHER IS PHYSICAL DEPENDENCE OR THERE'S NOT IN RATS, RIGHT?

A. CORRECT.

Q. OKAY.

A. YOU WOULD DO THAT.

Q. YOU CONCLUDED IN YOUR RESEARCH THAT NICOTINE WAS A RELATIVELY WEAK POSITIVE REINFORCER, CORRECT?

A. THAT STATEMENT WAS MADE VERY EARLY ON IN AN ATTEMPT -- YES, WE DID MAKE THAT STATEMENT VERY EARLY ON IN AN ATTEMPT TO QUALIFY OUR RESULTS. AGAIN, THIS WAS THE FIRST -- EARLY ON AT PHILIP MORRIS, WHEN I WAS THERE, THIS WAS THE FIRST REAL DEMONSTRATION OF NICOTINE AS A POSITIVE REINFORCER WITH RATS. WE WEREN'T SURE WHAT TO EXPECT.

7716

THE SELF-ADMINISTRATION WE GOT OUT OF THE RATS WAS VERY RELIABLE. BUT THE NUMBERS WERE SOMEWHAT LOW, AT LEAST COMPARING TO OTHER STUDIES PUBLISHED IN THE LITERATURE.

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WHAT WE REALLY NEEDED TO DO -- SO IN ONE SENSE WE WERE BEING CONSERVATIVE BECAUSE IT WAS THE VERY FIRST STUDY, AND WITH ANY STUDY, YOU WANT TO SEE REPLICATION AND EXPANSION.

Q. DOCTOR, WERE YOU COMPARING --

A. AND --

Q. I'M SORRY.

A. I JUST WANTED TO SAY --

Q. FINISH YOUR ANSWER.

A. -- WHAT WE REALLY NEEDED TO DO FOR THAT QUALIFIER IS TO COMPARE NICOTINE DIRECTLY TO OTHER DRUGS OF ABUSE WHICH WE WERE NOT ALLOWED TO DO.

SO WITHOUT ANY DIRECT COMPARISON, IT'S HARD TO SAY WHETHER IT'S WEAKER OR STRONGER. YOU COULD MAKE THE SAME CLAIM FOR HEROIN BEING WEAKER THAN COCAINE, FOR EXAMPLE, COMPARING A CROSS STUDY.

Q. WELL, DIDN'T YOU, IN YOUR STUDIES, ACTUALLY MAKE A COMPARISON BETWEEN THE REINFORCING EFFECT OF

7717

NICOTINE AND THE REINFORCING EFFECT OF FOUR CLASSES OF ABUSED SUBSTANCES?

A. IN OUR ACTUAL EXPERIMENTS, NO. WE WERE NEVER ABLE TO BRING IN CONTROLLED SUBSTANCES, COMMONLY KNOWN AS DRUGS OF ABUSE, INTO THE LAB.

Q. WELL, DO YOU RECALL WHETHER OR NOT YOU CONTRASTED AND COMPARED, FOR EXAMPLE, THE REINFORCING EFFECT OF NICOTINE, WHICH, AS YOU'VE SAID, YOU DESCRIBED IN YOUR EARLY-ON WORK AS BEING WEAK, WITH THE REINFORCING EFFECT OF THINGS LIKE OPIATES, AMPHETAMINES, BARBITURATES AND ALCOHOL?

A. YES. AGAIN, THESE WERE DISCUSSED COMPARING OUR RESULTS IN PUBLISHED STUDIES IN THE LITERATURE.

AGAIN, TO REALLY MAKE AN ADEQUATE COMPARISON TO CONTROL FOR ALL OF THE VARIABLES THAT COME INTO PLAY WHEN YOU COMPARE STUDIES FROM DIFFERENT LABORATORIES, YOU REALLY NEED TO DO A DIRECT COMPARISON IN YOUR LABORATORY, PREFERABLY IN THE SAME RATS, TO GET A REAL UNDERSTANDING OF THAT. AND WITHOUT THAT TYPE OF ADDITIONAL DATA, THE CONCLUSION THAT

7718

IT WAS WEAK WAS VERY CONSERVATIVE AND PROBABLY WAS VERY UNWARRANTED IN ONE SENSE.

Q. DOCTOR, WHAT I'M DOING IS THIS. JUST TO SEE IF I CAN REFRESH YOUR RECOLLECTION ON SOME OF THIS -- I'M GOING TO -- ASSUMING I CAN FIND IT HERE IN A MINUTE, I'M GOING TO GIVE YOU A COPY OF THE -- A DRAFT REPORT OF YOUR RESEARCH FOR 1984 AND

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ASK YOU SOME QUESTIONS ABOUT IT.
FIRST OF ALL, WHETHER YOU REMEMBER IT
OR NOT.

MR. GARDNER: 18299?
MR. GOLDSTEIN: CORRECT, BEGINNING ON LINE 3.
MR. GARDNER: OKAY.
(READING:)

Q. DOCTOR, CAN YOU TAKE A QUICK
LOOK AT THIS DOCUMENT, TELL ME IF YOU
RECOGNIZE IT.
A. IT LOOKS LIKE A DRAFT OF AN
ANNUAL REPORT.
Q. AND IS THIS -- AS YOU LOOK AT
IT, IT BEGINS AT THE TOP, WE'VE
CONTINUED TO USE THE
SELF-ADMINISTRATION TECHNIQUE?

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A. CORRECT.
Q. DOES THIS LOOK LIKE A DRAFT OF
THE ANNUAL REPORT FOR THE BEHAVIORAL
PHARMACOLOGY LAB?
A. SURE.
Q. OKAY.
A. YES.
Q. AND AS YOU LOOK AT SOME OF THE
DATA IN THERE, FOR EXAMPLE, PAGE 6,
IT'S FAR TOO COMPLICATED FOR ME TO TRY
TO ASK YOU QUESTIONS ABOUT IT, BUT
DOES THAT LOOK LIKE TO YOU -- DOES
THAT LOOK LIKE THE KIND OF STUDIES
THAT YOU WOULD DO?
A. THIS LOOKS LIKE ONE OF OUR
ANNUAL REPORTS, YES.
Q. OKAY. NOW, IN HERE, YOU MAKE
REFERENCE, IF YOU LOOK AT THE VERY
FIRST PAGE RIGHT UNDER EXPERIMENT ONE,
WHERE YOU SAY, THE WEAK REINFORCING
EFFECT OF NICOTINE IS NOTABLY
DIFFERENT FROM THE FOUR CLASSES OF
ABUSED SUBSTANCES --
A. UH-HUH.
Q. -- DO YOU SEE THAT?
A. YES. RIGHT HERE.
Q. AND THEN IT SAYS, HOWEVER, THE
LACK OF A PHYSIOLOGICAL DEPENDENCE

7720

FOLLOWING CHRONIC ACCESS SETS THE
NICOTINE APART FROM ONLY THREE
CLASSES.
NOW, ACTUALLY, WHAT YOU WERE
TALKING ABOUT THERE IS THAT
AMPHETAMINES AND COCAINE ARE THE CLASS
THAT DOESN'T CREATE -- THAT IS A
POWERFUL REINFORCER, AS OPPOSED TO THE
OTHERS, RIGHT?
A. WOULD YOU REPEAT THAT, PLEASE.
Q. SURE. WHAT I'M SAYING IS,
JUST SO WE'RE SEEING WHAT YOU SAID IN
YOUR ANNUAL REPORT, YOUR DRAFT ANNUAL
REPORT HERE, IS YOU'RE BASICALLY
SAYING THAT THREE OF THE FOUR

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CLASSES --
LET ME START THAT AGAIN.
WHAT I'M SAYING IS, JUST SO WE'RE SEEING WHAT YOU SAID IN YOUR ANNUAL REPORT, YOUR DRAFT ANNUAL REPORT HERE, IS YOU'RE BASICALLY SAYING THAT THREE OF THE FOUR OF THOSE CLASSES THAT WE TALKED ABOUT OF ABUSED SUBSTANCES ARE MORE POWERFUL, POSITIVE REINFORCERS THAN NICOTINE?

A. CORRECT.

Q. OKAY. AND THE ONE -- THE ONE THAT IS DIFFERENT IS AMPHETAMINES AND

7721

COCAINE?

A. I DON'T -- I'M NOT -- I'M SORRY. I'M NOT FOLLOWING THAT.

Q. OKAY. IF YOU READ THE FIRST PARAGRAPH THERE -- LET ME SEE IF I CAN STRAIGHTEN IT OUT THIS WAY.
WHY DON'T I GIVE YOU A MINUTE TO READ THAT FIRST PARAGRAPH, AND THEN YOU CAN PROBABLY HELP US ALL WITH THIS.
THE SUBJECT MATTER IS PHYSIOLOGICAL DEPENDENCE AND REINFORCEMENT.

A. OKAY.

Q. OKAY. SO YOU HAD ESTABLISHED THROUGH YOUR PRELIMINARY RESEARCH THAT NICOTINE DID NOT CREATE PHYSICAL DEPENDENCE, CORRECT?

A. CORRECT.

Q. AND I THINK IN THIS REPORT, YOU WERE SAYING THAT, EXCEPT FOR AMPHETAMINES AND COCAINE, THE OTHER THREE CATEGORIES, ALCOHOL, HEROIN, MORPHINE, DO CREATE A PHYSICAL DEPENDENCE, RIGHT?

A. YES. ALCOHOL OR BARBITURATES AND OPIATES ARE WELL-KNOWN IN THEIR STRONG, PHYSICAL DEPENDENCE-PRODUCING

7722

PROPERTIES.

Q. YOU WERE DISTINGUISHING -- ON THE ONE HAND, YOU WERE SAYING NICOTINE DOESN'T CREATE A PHYSICAL DEPENDENCE. ALCOHOL DOES, BARBITURATES DO, HEROIN DOES. BUT COCAINE IS MORE LIKE NICOTINE IN THAT REGARD, IT DOES NOT?

A. AMPHETAMINES AND COCAINES AND THOSE CLASSES OF DRUGS CERTAINLY ARE DIFFERENT, YES. IN THE ONE STUDY WE CONDUCTED WITH NICOTINE, THE INITIAL STUDY, WE WERE UNABLE TO DEMONSTRATE A PHYSICAL DEPENDENCE.

Q. OKAY. SO, THEN, AS I UNDERSTAND YOUR REPORT WHEN I READ IT, YOU THEN WENT ON TO SEE WHETHER COCAINE AND AMPHETAMINES WERE DIFFERENT FROM NICOTINE IN SOME OTHER WAY. THAT IS, YOU DID SOME ACTUAL RESEARCH STUDIES TO SEE WHETHER

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COCAINE -- SELF-ADMINISTRATION OF COCAINE OR AMPHETAMINES HAD BEEN FOUND TO DISRUPT ONGOING BEHAVIOR THAT WERE MAINTAINED BY OTHER REINFORCERS; ISN'T THAT WHAT YOU WERE SAYING AT THE BOTTOM OF THAT PAGE?

A. I'LL HAVE TO TAKE A FEW MINUTES TO READ THIS.

7723

Q. SURE. TAKE A MINUTE AND LOOK AT IT.

YOU CAN SEE WHERE IT SAYS THE PURPOSE OF THE PRESENT EXPERIMENT?

A. YES. RIGHT. OKAY. YES. I SEE WHERE YOU ARE.

Q. OKAY. AND YOUR CONCLUSION WAS THAT NICOTINE DOES NOT INTERFERE WITH THE SELF-ADMINISTRATION OF ANOTHER REINFORCER, LIKE FOOD, BUT COCAINE DOES, RIGHT?

A. DEPENDING UPON YOUR DOSE AND YOUR CONDITIONS OF DELIVERY, YES, AND THAT SORT OF THING, YES. I MEAN --

Q. OKAY.

A. -- IN THIS ONE -- AGAIN, IN THIS ONE FIRST STUDY, IT LOOKS LIKE WE WERE UNABLE TO DEMONSTRATE THAT.

Q. OKAY. AND TO THE EXTENT THAT -- TO THE EXTENT THAT PHYSICAL DEPENDENCE, PHYSIOLOGICAL DEPENDENCE IS VIEWED BY THE SCIENTIFIC COMMUNITY AS A CRITERIA FOR ADDICTION, YOUR RESEARCH WAS ACTUALLY HELPFUL TO THE COMPANY, WAS IT NOT?

A. WELL, ACTUALLY, PHYSIOLOGICAL DEPENDENCE AT THAT TIME WAS NOT VIEWED AS A CRITERION FOR ADDICTION. IT WAS

7724

A POSSIBLE CRITERIA FOR SOME, BUT THAT -- ALTHOUGH THAT WAS AN OLDER VIEW BY THE EARLY '80S, MOST OF THE TEXTBOOKS THAT WERE OUT DID NOT INSIST ON HAVING PHYSIOLOGICAL DEPENDENCE AS A CRITERION FOR ADDICTION. IT COULD BE THERE, BUT IT WASN'T ESSENTIAL.

Q. ALL RIGHT. NOW, WHEN YOU TOOK RATS OFF NICOTINE IN YOUR STUDIES OF SELF-ADMINISTRATION OF NICOTINE, WHEN YOU TOOK THE RATS OFF THE NICOTINE, THEY DID NOT EXPERIENCE, OR YOU DID NOT OBSERVE PHYSICAL WITHDRAWAL SYMPTOMS IN THE RATS, DID YOU?

A. THAT IS CORRECT.

Q. IT'S CORRECT THAT YOU DID NOT OBSERVE WITHDRAWAL SYMPTOMS?

A. WE DID NOT IN OUR STUDIES, ALTHOUGH, WITHIN FIVE TO EIGHT YEARS, THERE WERE A NUMBER OF REPORTS IN THE LITERATURE USING MORE SENSITIVE TECHNIQUES, APPARENTLY, THAN WE DID, AND THEY WERE ABLE TO DEMONSTRATE IN THREE OR FOUR DIFFERENT LABORATORIES PHYSIOLOGICAL WITHDRAWAL IN RATS

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FOLLOWING CHRONIC NICOTINE ADMINISTRATION.

Q. BUT AS FAR AS WHAT YOU WERE

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SAYING TO YOUR SUPERIORS AND WHAT YOU WERE SAYING IN YOUR REPORTS TO PHILIP MORRIS, YOU DIDN'T FIND ANY?

A. WE DO NOT FIND ANY. WE DO NOT DEMONSTRATE IT.

Q. NOW, I WANT TO TALK TO YOU ABOUT ANALOGS. OKAY?

A. ABOUT?

Q. ANALOGS.

NOW, AS I RECALL WHAT YOU SAID ON TUESDAY, YOU WERE SAYING THAT THESE NICOTINE ANALOGS, ONE OF THE IDEAS OR PART OF THE IDEA BEHIND THE DEVELOPMENT OF A NICOTINE ANALOG -- AND AN ANALOG IS A -- AN ANALOG IS SOMETHING YOU MAKE IN THE LABORATORY, AND IT'S A SUBSTITUTE FOR THE NATURAL COMPOUND, RIGHT?

JUST SO -- I WANTED TO MAKE SURE THE JURY KIND OF GETS US BACK TO WHERE WE WERE LAST TUESDAY.

A. YES.

Q. SO ONE OF THE REASONS FOR LOOKING AT THESE ANALOGS WAS THE COMPANY WAS KIND OF PROTECTING ITSELF AGAINST THE POSSIBILITY THAT NICOTINE WOULD BE BANNED. IF NICOTINE WERE BANNED FOR USE IN CIGARETTES, THEY

7726

WANTED TO HAVE SOMETHING ELSE THAT THEY COULD USE.

A. WELL, THAT WAS ONE OF THE POSSIBILITIES. IT WASN'T -- I CAN'T SAY I WAS EVER -- I WAS NEVER TOLD THAT WAS THE DRIVING FORCE BEHIND THE ANALOGS. IT WAS ONE OF THE CONSIDERATIONS THAT THEY MIGHT HAVE TO DEAL WITH.

THEY MIGHT WANT A COMPOUND THAT WAS, AGAIN, BETTER IN SOME WAYS AND MAINTAINED THE DESIRED QUALITIES WITHOUT LOSING THOSE -- YOU KNOW, WITHOUT LOSING THOSE QUALITIES, SO --

Q. OKAY. AND I REMEMBER YOU TESTIFYING -- AND YOU SAID THAT YOU HEARD THAT -- THAT YOU HEARD THAT THAT WAS ONE OF THE POSSIBILITIES, BUT --

A. THAT WAS DISCUSSED AT THE MEETINGS.

Q. THAT WAS DISCUSSED. OKAY.

AND IT WAS DISCUSSED THAT THE COMPANY WANTED TO BE PREPARED FOR THAT POSSIBILITY, RIGHT?

A. I WON'T SPEAK FOR THE COMPANY. BUT FOR THE SCIENTIFIC GROUP, YES. IN

7727

CASE THEY -- IN CASE THAT THEY NEEDED

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TO PUT IN A SUBSTITUTE FOR NICOTINE, THEY WOULD HAVE ONE ON THE SHELF, READY TO GO.

Q. AND I THINK THAT'S AN INTERESTING OBSERVATION YOU JUST MADE. WHEN YOU SAID YOU WON'T SPEAK FOR THE COMPANY, YOUR DISCUSSIONS, LARGELY, EXCEPT FOR WHEN YOU HAD A VISITOR, WHICH YOU SAID WASN'T OFTEN, BUT YOUR DISCUSSIONS LARGELY WERE WITH THE RESEARCH SCIENTISTS AT THE R&D CENTER, CORRECT?

A. THE RESEARCH SCIENTISTS AT THE R&D CENTER AND SELECTED CONSULTANTS, YES.

Q. RIGHT. LIKE DOCTOR -- WELL, WE'LL TALK ABOUT SOME OF THEM. BUT THAT'S RIGHT.

YOU WEREN'T ACTIVELY INVOLVED IN TALKING TO THE MANAGEMENT PEOPLE IN NEW YORK, FOR EXAMPLE?

A. WE WOULD HAVE CONVERSATIONS WITH FRED NEWMAN ON OUR PAPERS, THE MEANING OF OUR PAPERS. THAT SORT OF THING, EXPLAINING THOSE TO HIM. BUT IN -- OTHER THAN FOR ONE TRIP WHERE DE NOBLE WENT UP TO NEW YORK TO DO A

7728

PRESENTATION AT CORPORATE HEADQUARTERS ON OUR WORK, MOST OF OUR WORK WAS REPORTED UP THROUGH THE CHAIN.

Q. OKAY. UP THROUGH THE CHAIN AT THE R&D CENTER?

A. TO NEW YORK. JIM CHARLES WOULD OFTEN HAVE, I -- I WAS TOLD BY HIM, CONVERSATIONS WITH FRED NEWMAN ON THE WORK.

Q. WELL, WHAT I MEANT, DOCTOR, YOU WEREN'T INVOLVED IN DECISIONS ABOUT WHAT PRODUCTS TO USE, HOW TO COMMERCIALIZE PRODUCTS --

A. CORRECT.

Q. -- THOSE KINDS OF DECISIONS.

THAT WAS NOT ANYWHERE NEAR YOUR FIELD OF -- YOUR RESPONSIBILITY?

A. WE WEREN'T INVOLVED IN PRODUCT DECISIONS.

Q. OKAY.

A. IN TERMS OF MARKETING AND THAT SORT OF THING OR ALTER OR MANIPULATING A PRODUCT.

Q. OKAY.

A. A SPECIFIC PRODUCT.

Q. OR DOING THE ENGINEERING WORK TO TRY TO COMMERCIALIZE A PRODUCT, YOU WEREN'T INVOLVED WITH THE PRODUCTION

7729

FACILITY, THE MANUFACTURING PROCESS; THAT'S SOMETHING YOU WEREN'T INVOLVED WITH, RIGHT?

A. CORRECT.

MR. GARDNER: 18317.

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MR. GOLDSTEIN: CORRECT, LINE 7.
MR. GARDNER: (READING:)

Q. YOU SAID OVER THE TWO AND A HALF YEARS THAT YOU WORKED IN THE LAB, YOU TESTED OVER CLOSE TO 100 ANALOGS, RIGHT?

A. WE TEST -- TEST -- THERE ARE OVER 100 ANALOGS GENERATED. WE TESTED MANY OF THOSE.

Q. YOU WERE DOING THE TESTING FOR THE BRAIN AFFECT. YOU WEREN'T DOING THE CARDIOVASCULAR TESTING, CORRECT?

A. CORRECT.

Q. IN FACT, ONE OF THE PEOPLE THAT WAS DOING THE CARDIOVASCULAR TESTING WAS DR. LEO ABOOD --

A. CORRECT.

Q. -- FROM THE UNIVERSITY OF ROCHESTER, AND HE WAS ONE OF THE OUTSIDE CONSULTANTS THAT THE COMPANY WAS USING --

7730

A. CORRECT.

Q. -- CORRECT?
OKAY.
AND HOW ABOUT JACK EAGLE FROM THE MEDICAL COLLEGE OF VIRGINIA, WAS HE ALSO DOING CARDIOVASCULAR TESTING?

A. HE HAD HAD A CONTRACT WITH PHILIP MORRIS TO DO SOME OF THAT, ALSO. IT TERMINATED BY THE TIME I WAS THERE OR THROUGH MOST OF MY TIME THERE.

Q. DO YOU KNOW WHETHER SUBSEQUENT TO THAT HE ALSO DID FURTHER CARDIOVASCULAR TESTING ON NICOTINE ANALOGS?

A. I DO NOT KNOW.

Q. NOW, DEVELOPING A SUCCESSFUL NICOTINE ANALOG, ONE THAT WORKED -- FULFILLED ALL OF THE OBJECTIVES AND DIDN'T HAVE A DOWNSIDE, WOULD HAVE BEEN A SIGNIFICANT COMPETITIVE ADVANTAGE FOR PHILIP MORRIS IF THE OTHER COMPANIES DIDN'T HAVE ONE, RIGHT?

A. COMPETITIVE -- NOW, YOU'RE ASKING ME ABOUT BUSINESS AND COMMERCIALIZATION ASPECTS OR ABOUT --

Q. WELL, LET ME ASK YOU THIS:

7731

DID THE R&D --

A. -- MARKETING --

Q. DID THE R&D SCIENTISTS, THOSE OF YOU WHO WERE THERE -- BECAUSE ALL I WANT TO ASK ABOUT IS WHAT YOU KNEW AT THE TIME -- DID THE R&D SCIENTISTS THINK THAT THE DEVELOPMENT OF A SUCCESSFUL ANALOG WOULD BE A COMPETITIVE BREAKTHROUGH FOR PHILIP MORRIS?

A. DEVELOPMENT OF AN ANALOG WOULD

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HAVE BEEN -- WOULD HAVE MET ONE OF THE CRITERIA THAT -- WOULD HAVE MET AN OBJECTIVE OF THE RESEARCH CENTER FOR PHILIP MORRIS. WHETHER THEY CONSIDERED THAT COMPETITIVE VERSUS R.J. REYNOLDS OR SOME OTHER COMPANY OR ONLY CONCERNED ABOUT THEIR OWN ASPECTS, I CAN'T COMMENT ON THAT. IT CERTAINLY WAS SOMETHING THEY WANTED DONE TO ENSURE THE CONTINUED USE OF THEIR OWN PRODUCT.

Q. SURE. BECAUSE IF NICOTINE HAD BEEN BANNED, THEY WOULD BE able TO -- SORRY.

IF NICOTINE HAD BEEN BANNED, THEY WOULD HAVE BEEN ABLE TO CONTINUE SELLING THE PRODUCT, USING THE ANALOG,

7732

AND IF THE OTHER COMPANIES HADN'T BEEN SUCCESSFUL, THAT WOULD HAVE BEEN AN ENORMOUS COMPETITIVE ADVANTAGE, RIGHT?

A. I SUPPOSE. I MEAN, AGAIN, THAT GETS BEYOND ANYTHING THAT I WORKED ON.

THE COURT: OKAY. YOU'RE ADMONISHED THAT IT IS YOUR DUTY NOT TO CONVERSE AMONG YOURSELVES, OR WITH ANYONE ELSE ON ANY SUBJECT CONNECTED WITH THIS TRIAL, OR TO FORM OR EXPRESS ANY OPINION THEREON UNTIL THE CAUSE IS FINALLY SUBMITTED TO YOU.

WE'RE GOING TO GO TO 3:15. THE BOSS FIGURED OUT FOR EVERYBODY THAT WE DON'T HAVE ANY MORE OF THEM ONE AND A HALF HOURS AT A TIME, AND SO BE PREPARED THAT HOUR AND A HALF AHEAD. BYE, FOLKS.

2 O'CLOCK FOR EVERYBODY. 2 O'CLOCK.

(RECESS.)

THE COURT: RELLER VERSUS PHILIP MORRIS, BC 261796.

THE RECORD SHOULD REFLECT THAT ALL TWELVE JURORS AND THE FOUR ALTERNATES ARE PRESENT.

MR. PIUZE IS HERE FOR PLAINTIFF; MR. GARDNER FOR DEFENDANT.

DR. LEWIS IS PRESENT.

AND MR. GOLDSTEIN IS PRESENT IN THE WITNESS STAND, STILL PLAYING THE PART OF DR. MELE.

7733

AND MR. GARDNER, THIS IS ON YOUR CLOCK, RIGHT?

MR. GARDNER: SURE. ABSOLUTELY.

THE COURT: THANK YOU. OKAY.

MR. GARDNER: ALL RIGHT.

(READING:)

Q. NOW, YOU SAID YOU SAW SOME OF THE CARDIOVASCULAR -- WELL, BEFORE I GET THERE.

I THINK YOU SAID THERE WERE TWO CANDIDATES THAT YOU THOUGHT MET THE GOALS OF THE PROGRAM, 2-PRIME METHYLNICOTINE AND 4-PRIME METHYLNICOTINE, CORRECT?

A. CORRECT.

Q. AND THE GOALS OF THE PROGRAM,

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AS YOU UNDERSTOOD IT, WERE MAINTAINING THE SAME -- THE PHYSIOLOGICAL EFFECTS OF NICOTINE AND DECREASING THE CARDIOVASCULAR CONCERN?

A. RIGHT. KEEP THE RATS RESPONDING AND ELIMINATE THE CARDIOVASCULAR TOXICITY.

Q. RIGHT. NOW, YOU DIDN'T SEE YOURSELF, PERSONALLY, ALL OF THE DATA ON THE CARDIOVASCULAR SIDE, DID YOU?

A. ALL OF THE DATA?
PROBABLY NOT, BECAUSE IF

7734

YOU'RE NOT DOING THE STUDIES YOURSELVES, RARELY DOES ANYONE SEE ALL OF THE DATA.
WE SAW DATA THAT WAS SUMMARIZED AND PROVIDED BY DR. ABOOD WHO WAS PRIMARILY RESPONSIBLE FOR GENERATING THOSE FOR THE COMPANY.

Q. AND DID YOU SEE DR. EAGLE'S DATA?

A. I DON'T -- I DON'T RECALL SEEING HIS DATA. HIS DATA WAS NOT -- HE WAS NOT A REGULAR ATTENDEE AT THE ANALOG MEETINGS.

Q. NOW, IF YOU WANTED TO USE AN ANALOG IN PLACE OF NICOTINE, YOU'D HAVE TO TAKE THE NICOTINE OUT FIRST?

A. IF YOU WANTED TO USE AN ANALOG IN PLACE OF NICOTINE?

Q. YES.

A. PRESUMABLY, YOU WOULD HAVE TO TAKE IT OUT, IF YOU WERE GOING TO BE REPLACING IT.

Q. SURE. THAT'S JUST COMMON SENSE, RIGHT?
AND I THINK YOU SAID IN RESPONSE TO QUESTIONS THAT WERE ASKED BY PLAINTIFFS' COUNSEL THAT YOU WERE AWARE THAT EXPERIMENTALLY, IN 1984,

7735

PHILIP MORRIS WAS ABLE TO TAKE NICOTINE OUT OF -- OUT OF ITS EXPERIMENTAL CIGARETTES IN THE LABORATORY, RIGHT?

A. PHILIP MORRIS COULD PRODUCE CIGARETTES WITH VARYING AMOUNTS OF NICOTINE, INCLUDING NO NICOTINE, SO THEY HAD THE TECHNOLOGY TO TOTALLY REMOVE NICOTINE FROM CIGARETTES.

Q. AND THAT WAS TECHNOLOGY THAT YOU REFERRED TO AS HAVING BEEN AVAILABLE IN THE EXPERIMENTAL LABORATORY; ISN'T THAT RIGHT?

A. NO. THE LABORATORY WOULD REQUEST THESE CIGARETTES AND THOSE CIGARETTES WERE PRODUCED OUTSIDE, AND THEN SENT BACK IN. I MEAN, OUTSIDE OF THE BEHAVIORAL RESEARCH UNIT.
WE DIDN'T MAKE OUR OWN CIGARETTES, OR FRANK RYAN DIDN'T MAKE THOSE CIGARETTES. THEY WERE MADE

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SOMEWHERE ELSE IN THE COMPANY.
Q. DO YOU KNOW WHERE THEY MADE -- WHERE THEY WERE MADE IN THE COMPANY?
A. I DO NOT.
Q. DO YOU KNOW IF THEY WERE MADE SOMEWHERE OTHER THAN THE RESEARCH AND

7736

DEVELOPMENT CENTER?
A. YOU MEAN PHYSICALLY IN THE R&D BUILDING OR NEXT DOOR IN MANUFACTURING?
Q. YES.
A. OR NEXT DOOR IN -- NO, I HAVE NO IDEA.
Q. OKAY. AND THE QUESTION, DOCTOR, WAS, DO YOU KNOW WHEN THOSE EXPERIMENTAL CIGARETTES WERE PRODUCED WITHOUT NICOTINE, WHETHER NICOTINE AND NICOTINE ALONE WAS TAKEN OUT OR WHETHER OTHER THINGS, THE EXPERIMENTAL PROCESS THAT WAS USED TO TAKE NICOTINE OUT, ALSO EXTRACTED OTHER THINGS WITH IT?
A. I ONLY KNOW WHAT I WAS TOLD BY THE RESEARCHERS AND THEY -- THEY CLAIMED THAT IT WAS NICOTINE ONLY THAT WAS REMOVED.
Q. DID YOU EVER ASK THAT QUESTION?
DID YOU SAY -- DID YOU EVER ASK THE QUESTION, ARE YOU ONLY TAKING OUT NICOTINE, OR ARE THERE OTHER THINGS IN THE TOBACCO THAT'S COMING OUT ALONG WITH IT?
DO YOU REMEMBER THAT?

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A. WELL, NO, BECAUSE THERE ARE SO MANY STUDIES BEING DONE THAT THEY WOULD SELECTIVELY ALSO ALTER OTHER ASPECTS OF THE CIGARETTE. SO I HAD FAITH IN THE RESEARCHERS, THAT WHEN THEY WERE -- THEY SAY THEY WERE MANIPULATING A PARTICULAR ASPECT, THAT'S WHAT THEY WERE DOING. THOSE MIGHT HAVE BEEN NICOTINE, NICOTINE STUDIES; OTHERS WOULD HAVE ALTERED FLAVOR. OTHERS WOULD ALTER THE FEEL AND HEFT OF THE CIGARETTE.
Q. DOCTOR, DO YOU KNOW WHETHER IN 1984 THERE WAS ANY COMMERCIAL PROCESS THAT WAS AVAILABLE TO PHILIP MORRIS TO EXTRACT NICOTINE AND NICOTINE ALONE FROM CIGARETTES?
A. COMMERCIAL PROCESS. YOU MEAN LARGE-SCALE MANUFACTURING?
Q. RIGHT. THAT'S HOW CIGARETTES ARE MADE, LARGE SCALE, IN MANUFACTURING, RIGHT?
A. NO, I DON'T KNOW THAT.
Q. SO YOU -- IN TERMS --
A. I DON'T KNOW IF THERE'S A DIFFERENCE BETWEEN COMMERCIAL

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PROCESSING AND THE EXPERIMENTAL
CIGARETTE PRODUCTION, IF THAT'S WHAT

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YOU'RE ASKING.

Q. SO WHETHER OR NOT PHILIP MORRIS HAD ANY CAPABILITY IN A COMMERCIAL PRODUCTION, LARGE-SCALE, LARGE VOLUME PRODUCTION, TO EXTRACT NICOTINE FROM CIGARETTES AS OPPOSED TO WORK IN THE LABORATORY IS SOMETHING THAT YOU JUST DON'T KNOW, CORRECT?

A. THAT IS CORRECT.

Q. NOW, ARE YOU AWARE OF WHETHER OR NOT THE USE OF 2-PRIME METHYLNICOTINE OR 4-PRIME METHYLNICOTINE WOULD INCREASE OR NOT INCREASE THE LEVEL OF TOBACCO-SPECIFIC NITROSAMINES IN A CIGARETTE?

A. I DON'T KNOW.

Q. SO IT WAS NOT WITHIN YOUR AREA OF RESPONSIBILITY, AS A BEHAVIORAL PHARMACOLOGIST WORKING IN THE RAT LABORATORY DOING THE EXPERIMENTS YOU WERE DOING, TO BE CONCERNED WITH THE LEVEL OF TOBACCO-SPECIFIC NITROSAMINES IN SMOKE?

A. CORRECT. IT WAS NOT AN AREA I WORKED IN.

Q. NOW, YOU SAID THERE WERE ALSO QUESTIONS ABOUT FDA APPROVAL FOR ANALOGS, TRUE?

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A. YES. CORRECT.

Q. OKAY. AND AMONG THE RESEARCH SCIENTISTS, QUESTIONS WERE DISCUSSED ABOUT, FOR EXAMPLE, WHETHER THE FEDERAL DRUG ADMINISTRATION -- LET ME START THAT AGAIN. OKAY.

AND AMONG THE RESEARCH SCIENTISTS, QUESTIONS WERE DISCUSSED ABOUT, FOR EXAMPLE, WHETHER THE FEDERAL DRUG ADMINISTRATION -- FOOD AND DRUG ADMINISTRATION, WOULD HAVE TO APPROVE AN ANALOG BEFORE IT COULD BE USED IN A CIGARETTE, RIGHT?

A. THAT WAS A QUESTION THAT DID COME UP AT THE ANALOG MEETINGS.

Q. AND YOU AND YOUR FELLOW --

A. NOBODY SEEMED TO KNOW THE ANSWER TO THAT.

Q. PARDON?

A. NOBODY SEEMED TO KNOW THE ANSWER TO THAT.

Q. RIGHT.

AND YOU AND YOUR FELLOW SCIENTISTS TALKED ABOUT THE FACT THAT NOBODY KNEW THE ANSWER TO THAT. NOBODY KNEW WHETHER THE COMPANY WANTED TO GET FDA APPROVAL OR WHETHER THEY DIDN'T WANT TO GET FDA APPROVAL,

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RIGHT?

A. CORRECT.

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Q. AND YOU NEVER HEARD HOW, IF AT ALL, THOSE KINDS OF QUESTIONS WERE RESOLVED?
A. CORRECT.
Q. AND YOU WERE NOT INVOLVED IN ANY DECISIONS BY THE COMPANY TO USE OR NOT TO USE ANALOGS IN A COMMERCIAL CIGARETTE, CORRECT?
A. CORRECT.
Q. OKAY. AND YOU'RE NOT AWARE OF ANY FIRSTHAND KNOWLEDGE THAT ANY ANALOG WAS ACTUALLY USED IN A COMMERCIAL CIGARETTE?
A. NO. I NEVER FOUND OUT WHETHER THEY WERE USED, ALTHOUGH THE CLEAR INTENT OF THAT GROUP TO DISCUSS THESE WAS TO FIND THE COMPOUNDS THAT WE COULD RECOMMEND AS BEING THE BEST ANALOGS AND THEN HAND IT OVER TO THE NEXT GROUP.
Q. DR. MELE, I'M SWITCHING GEARS. I'M SWITCHING TO A DIFFERENT TOPIC HERE FOR A FEW MINUTES.
AND THE OTHER RESEARCH EFFORT THAT YOU TESTIFIED ABOUT -- I THINK I COVERED NICOTINE AND THE ANALOGS. I

7741

WANT TO TALK ABOUT ACETALDEHYDE FOR A COUPLE OF MINUTES. OKAY.
NOW, I THINK YOU TESTIFIED THAT ACETALDEHYDE IS A COMPOUND THAT IS FOUND IN CIGARETTE SMOKE, BUT IT ALSO EXISTS IN NATURE. YOU CAN FIND IT IN FOODS LIKE YOGURT, RIGHT?
A. CORRECT. THAT'S MY UNDERSTANDING.
Q. OKAY. AND YOUR RESEARCH WAS THAT -- YOUR RESEARCH WAS THAT YOU FOUND THAT RATS WOULD SELF-ADMINISTER ACETALDEHYDE WHEN YOU PUT IT IN SOLUTION, JUST AS THEY WOULD NICOTINE, CORRECT?
A. CORRECT.
Q. AND YOU FOUND THAT WHEN YOU COMBINE THE TWO, NICOTINE AND ACETALDEHYDE, YOU GOT MORE SELF-ADMINISTRATION THAN WHEN USING EITHER ONE SEPARATELY, CORRECT?
A. CORRECT.
Q. SO IN EFFECT, YOU GOT MORE -- YOU GOT MORE REINFORCEMENT THAN YOU DID IF YOU USED EACH ONE OF THEM BY THEMSELVES?
A. YOU COULD CHARACTERIZE IT THAT WAY. THAT WOULD BE FAIR.

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Q. NOW, YOUR WORK SHOWING THAT THERE WAS MORE SELF-ADMINISTRATION WHEN NICOTINE AND ACETALDEHYDE WAS USED IN COMBINATION, THAT WAS, I THINK, A STUDY THAT YOU DID WITH FOUR RATS; IS THAT CORRECT?
A. YES. IF YOU'RE REFERRING TO

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THE -- THIS CAME UP CLEARLY AT THE DEPOSITION IN SOME DETAIL, AND IF YOU'RE REFERRING TO THAT, THE EIGHT AND THE FOUR --

Q. WHICHEVER. YOU STARTED WITH EIGHT AND ENDED UP WITH FOUR. IT WAS SOMEWHERE IN THE NEIGHBORHOOD OF FOUR TO EIGHT RATS, RIGHT?

A. RIGHT. IT DEFINITELY DEMONSTRATED PROOF OF THE CONCEPT THAT THE TWO COMPOUNDS TOGETHER HAD THIS SYNERGISTIC EFFECT.

Q. YOU ALREADY SAID, I THINK, EARLIER THIS AFTERNOON THAT YOUR WORK WITH NICOTINE DID NOT SHOW IN THOSE STUDIES THAT YOU DID, THAT NICOTINE CAUSED PHYSIOLOGICAL DEPENDENCE IN RATS.

AND MY QUESTION IS, YOUR WORK WITH ACETALDEHYDE ALSO SHOWED THAT THAT WAS TRUE, THAT ACETALDEHYDE DID

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NOT CAUSE PHYSIOLOGICAL DEPENDENCE IN RATS, CORRECT?

A. WE CERTAINLY LOOKED AT THE NICOTINE, ACETALDEHYDE COMBINATIONS. I DON'T RECALL WHETHER WE LOOKED AT ACETALDEHYDE ALONE, BUT WE PROBABLY DID. AND THE COMBINATIONS DID NOT PRODUCE A PHYSIOLOGICAL DEPENDENCE.

AGAIN, USING THE SAME TESTS AND PROCEDURES THAT WERE INEFFECTIVE IN SHOWING NICOTINE PHYSIOLOGICAL WITHDRAWAL WERE ALL INEFFECTIVE IN SHOWING PHYSIOLOGICAL WITHDRAWAL WITH THE COMBINATION, AGAIN, I THINK, INDICATING OUR PROCEDURES WERE NOT AS SENSITIVE AS THEY SHOULD -- THEY COULD HAVE BEEN.

Q. BUT AT LEAST AS FAR AS AT THAT TIME THAT YOU WERE REPORTING NONE YOUR REPORTS TO THE COMPANY, YOU WERE SHOWING NICOTINE BY ITSELF DIDN'T CREATE PHYSIOLOGICAL DEPENDENCE, ACETALDEHYDE BY ITSELF DIDN'T CREATE PHYSIOLOGICAL DEPENDENCE?

A. THAT'S PROBABLY TRUE, BUT I'D HAVE TO CHECK THE DOCUMENTS ON THOSE, OR YOU PROBABLY HAVE THOSE.

Q. AND YOU -- AND THE

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COMBINATION --

A. THE COMBINATION.

Q. -- OF THOSE TWO DID NOT CREATE PHYSIOLOGICAL DEPENDENCE, RIGHT?

A. CORRECT. AGAIN, IN THOSE INITIAL STUDIES THAT WE RAN.

Q. OKAY. SO IT WOULD BE FAIR TO SAY THAT YOU DIDN'T KNOW OF ANY DECISIONS THAT WERE BEING MADE BY THE COMPANY OR THAT EVER WERE MADE BY THE COMPANY TO USE ACETALDEHYDE IN THE COMMERCIAL PRODUCTION OF CIGARETTES

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WHILE YOU WERE AT THE COMPANY?
A. THAT -- THAT IS CORRECT. I DO NOT KNOW HOW THEY HANDLED THAT DATA.
Q. OKAY. AND YOU HAVE NO FIRSTHAND KNOWLEDGE THAT YOUR RESEARCH ON ACETALDEHYDE AND NICOTINE WAS EVER USED TO MODIFY ANY COMMERCIALLY SOLD CIGARETTE?
A. NO. NO ONE AT THE COMPANY EVER -- I NEVER HEARD ANYBODY AT THE COMPANY SAY THEY WERE -- THEY HAD MANIPULATED ACETALDEHYDE LEVELS IN A COMMERCIAL CIGARETTE.
Q. YOU LEFT THE COMPANY IN NOVEMBER, OR DECEMBER, WAS IT?
A. MY LAST DAY OF EMPLOYMENT AT

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PHILIP MORRIS WAS DECEMBER 31ST, 1984.
Q. AND YOU WERE PAID UP UNTIL THE DAY YOU LEFT?
A. CORRECT.
Q. AND YOU HAD AN OFFICE AT THE COMPANY THERE?
A. I HAD AN OFFICE.
Q. DID YOU HAVE SECRETARIAL SUPPORT?
A. YES. WE WERE ABLE TO USE THE PERSONNEL GROUP TO JOB SEARCH.
Q. THAT'S ALL. THANK YOU.

THE COURT: MR. PIUZE.

(MR. PAUL MELE'S DEPOSITION WAS READ BY THE PLAINTIFF, BY MR. PIUZE AND MR. GOLDSTEIN, AND REPORTED AS FOLLOWS:)

MR. PIUZE: (READING:)

Q. DR. MELE, YOU SAID IN RESPONSE TO MR. HEIMANN THAT YOU WERE NOT ALLOWED TO DO STUDIES COMPARING NICOTINE AND COCAINE.
WHAT REASONS WERE YOU GIVEN AS TO WHY YOU COULD NOT MAKE THOSE

7746

COMPARISON STUDIES?
A. WE WEREN'T ALLOWED TO BRING IN ANY CONTROLLED SUBSTANCE. A CONTROLLED SUBSTANCE INVOLVES ALL YOUR DRUGS OF ABUSE. DRUGS THAT HAVE ABUSE POTENTIAL ARE CONTROLLED BY THE DRUG ENFORCEMENT AGENCY AND ARE CATEGORIZED IN CERTAIN WAYS.
WE WERE NOT ALLOWED TO HAVE CONTROLLED SUBSTANCES IN THE LAB BECAUSE, AGAIN, BECAUSE OF THE ASSOCIATIVE NATURE OF A CONTROLLED DRUG AND NICOTINE. WE WERE JUST TOLD WE CANNOT HAVE THOSE TWO THINGS IN THE SAME ROOM. IT WAS A BAD ASSOCIATION.
Q. DID YOU AGREE WITH MR. REMINGTON'S COMMENT TO THE EFFECT

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THAT PEOPLE KNOW -- OR AT LEAST SOME
PEOPLE AT PHILIP MORRIS ACCEPT THE
PREMISE THAT NICOTINE IS ADDICTIVE?

A. CERTAINLY IN THE SCIENCE GROUP WE WORK UNDER, I BELIEVE THERE WAS NO QUESTION THAT THAT WAS THE CASE. THAT WAS THE WHOLE ASPECT OF THE ANALOG PROGRAM.

THERE MAY HAVE BEEN ISSUES THAT WE DIDN'T HAVE ALL OF THE DATA IN PLACE THAT WE WOULD HAVE LIKED TO HAVE

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HAD. BUT, AGAIN, WE WEREN'T -- WE WEREN'T TRYING TO PROVE THE POINT OR DISPROVE IT. WE WERE TRYING TO COME UP WITH AN ANALOG THAT WOULD KEEP PEOPLE SMOKING THE CIGARETTES. THAT WAS OUR -- THIS QUESTION OF ADDICTION OR DEPENDENCE WAS ASSUMED. OTHERWISE, THE ANALOG PROGRAM MAKES NO SENSE.

MR. GOLDSTEIN: THAT'S IT.
MR. PIUZE: ARE YOU SURE?
MR. GOLDSTEIN: YEAH.
MR. PIUZE: WELL, THEN, I HAVE NO FURTHER QUESTIONS.
MR. GOLDSTEIN: THANK YOU.
MR. GARDNER: I DON'T HAVE ANY MORE QUESTIONS, EITHER, YOUR HONOR.
THE COURT: ALL RIGHT, FOLKS. I HATE TO TELL YOU THIS, BUT WE'RE OUT OF WITNESSES FOR THE DAY, WHICH MEANS THAT MS. WASHINGTON IS GOING TO BE FORCED TO GO HOME AND GET READY FOR HER FIFTIETH REUNION.
HAVE A GREAT REUNION. THAT'S REALLY AMAZING. THAT'S GREAT.
ALTERNATE JUROR WASHINGTON: THANK YOU.
THE COURT: I WILL SEE YOU FOLKS ON TUESDAY MORNING, RIGHT?
MR. PIUZE: YES.
THE COURT: 8:30.
AT THAT POINT, REMEMBER, OUR DAY WILL GO 8:30

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TO 3:15. WE WOULD HAVE USED THIS TIME, BUT COUNSEL HAVE BEEN SO EFFICIENT THAT WE LITERALLY RAN OUT OF WITNESSES.
YOU ARE ADMONISHED THAT IT'S YOUR DUTY NOT TO CONVERSE AMONG YOURSELVES OR WITH ANYONE ELSE ON ANY SUBJECT CONNECTED WITH THIS TRIAL OR TO FORM OR EXPRESS ANY OPINION THEREON UNTIL THE CAUSE IS FINALLY SUBMITTED TO YOU.
COUNSEL, I JUST WANT TO GO OVER THE EXHIBITS FOR THE DAY.
MR. PIUZE: YES.
THE COURT: AND APART FROM THAT, YOU'RE GOING TO BE GONE, TOO. SO FORCE YOURSELF TO GET OUT OF HERE EARLY.
TUESDAY MORNING. THAT'S TUESDAY, JULY 1ST. OH, MY GOODNESS. TUESDAY MORNING, JULY 1ST, 8:30.
BYE, FOLKS.

(THE FOLLOWING PROCEEDINGS WERE HELD IN OPEN COURT OUT OF THE PRESENCE OF THE JURY:)

THE COURT: MR. PIUZE, YOU USED 2 HOURS AND 37 MINUTES. AND YOU GOT A LITTLE GRACE ON YOU, TOO.
AND MR. GARDNER, YOU GUYS USED 1 HOUR AND 17

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MINUTES.
IF ANYBODY WANTS TO CHECK --
MR. GARDNER: WHAT WAS -- I HEARD 1, 17 FOR US. I DID NOT HEAR MR. PIUZE.
THE COURT: 2 HOURS AND 37 MINUTES.
MR. GARDNER: THANKS.

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THE COURT: OKAY. SO I CAN REWIND THIS ONE NOW.
MR. GARDNER: ABSOLUTELY.
THE COURT: OKAY. STILL IN THE MATTER OF RELLER VERSUS PHILIP MORRIS, BC 261796.
THE RECORD SHOULD REFLECT WE'RE OUTSIDE THE PRESENCE OF THE JURY.
MR. PIUZE IS HERE FOR PLAINTIFFS; MR. GARDNER FOR DEFENDANTS.
DR. LEWIS IS NOT HERE.
AND I JUST WANTED TO GO OVER THE EXHIBITS.
WE HAD 242 THROUGH 248.
242 WAS A BLOWUP OF 241, WHICH HAD BEEN ADMITTED THE DAY BEFORE.
ANY OBJECTION, MR. PIUZE, OTHER THAN WHATEVER OBJECTIONS YOU HAVE FROM THE DAY BEFORE, WHICH WAS THE GALLUP POLL?
MR. PIUZE: NO.
THE COURT: OKAY. 242 IS RECEIVED IN EVIDENCE.

(EVID. - 242)

THE COURT: 243 IS THE FLOW CHART.
MR. GARDNER, I ASSUME YOU HAVE THE CONTINUING OBJECTIONS THAT WERE RAISED THIS MORNING?
MR. GARDNER: I DO, YOUR HONOR.
THE COURT: OKAY. THE OBJECTIONS ARE NOTED AND RESPECTFULLY OVERRULED.
243 IS IN EVIDENCE.

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(EVID. - 243)

THE COURT: 244, REPORT OF DR. CUMMINGS. THIS WAS THE ONE WITH THE ALLEGED, WHATEVER, IN IT. I'M GOING TO LET YOU USE IT -- BECAUSE IT WAS SOMEBODY ELSE'S CASE, REFERRING TO ANOTHER PARTY OTHER --.
MR. GARDNER: THAT'S CORRECT.
THE COURT: I'M GOING TO LET YOU USE WHATEVER YOU NEED TO AS DEMONSTRATIVE EVIDENCE IN ARGUMENT, SHOULD YOU WISH TO, BUT I DON'T THINK IT'S APPROPRIATE THAT THEY GET IT IN EVIDENCE. SO I'M GOING TO SAY NO.
UNLESS, MR. PIUZE, YOU HAVE A REASON TO HAVE THAT IN.
MR. PIUZE: SURE. I'D LIKE THE PART WHERE THEY SHOWED THAT THERE WERE 183,000 LUNG CANCER DEATHS IN THE UNITED STATES AND REPEATED IT TWICE, SO, SURE, IT CAN GO IN.
THE COURT: WELL, THE PROBLEM IS, WE'RE TALKING ABOUT THE WHOLE REPORT, I THINK.
MR. GARDNER: WE JUST HAD A PAGE FOR YOU. I THOUGHT YOU MIGHT HAVE LIKED THAT.
THE COURT: I WAS WAITING FOR SOMEBODY TO SAY SOMETHING ABOUT THAT. I THOUGHT YOU'D START SMILING, LIKE A CHESHIRE CAT, MR. PIUZE, BUT YOU DIDN'T.
MR. PIUZE: JUST DID.
THE COURT: THAT'S TRUE.
ALL RIGHT. THE BOTTOM LINE IS, I'M NOT GOING TO ALLOW IT IN EVIDENCE, BUT EITHER SIDE CAN USE THE -- WHAT

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WAS SHOWN BEFORE THE JURY, WHICH WAS PAGE WHO OF -- I'M
7751
SORRY. WHICH PAGE WAS THAT AGAIN, PAGE 4 OR SOMETHING?
MR. GARDNER: I BELIEVE PAGE 5, YOUR HONOR. AND IF I
COULD DIG IT UP, I'LL MAKE SURE I GET IT RIGHT.
THE COURT: WHATEVER PAGE IT WAS, YOU FOLKS CAN USE.
MR. GARDNER: PAGE 4.
THE COURT: PAGE 4. I HAD THAT RIGHT. OKAY.
MR. PIUZE: AND SO I WOULD NOT OBJECT IF THE DEFENSE
REALLY WANTS TO PUT IT IN EVIDENCE.
MR. GARDNER: IT SERVED ITS PURPOSE. WE DON'T NEED
IT.
THE COURT: OKAY. 245, THE REASON I'M NOT ALLOWING
IT IN EVIDENCE IS BECAUSE IT'S SOMEBODY ELSE'S REPORT, AND IT
WAS FAIR GAME FOR CROSS-EXAMINATION, BUT I JUST DON'T THINK
IT'S APPROPRIATE HERE. BUT I'M NOT PREVENTING EITHER SIDE
FROM USING IT DURING ARGUMENT.
245, BLOWUP OF THE MEDICAL ILLUSTRATION.
246, BLOWUP OF ADENOCARCINOMA.
247, BLOWUP OF THE PLACEMENT OF THE FILTER.
AND 248, BLOWUP OF PROGRESSIVE DISEASE.
MY TENTATIVE IS TO ALLOW IT IN.
ANY OBJECTION, MR. GARDNER?
MR. GARDNER: NO, YOUR HONOR.
THE COURT: ALL RIGHT. 245 TO 248 IS IN EVIDENCE.

(EVID. - 245 THROUGH 248)

THE COURT: IS THERE ANYTHING ELSE WE NEED TO DO
TODAY BEFORE I KICK YOU OUT OF HERE, NICELY, OF COURSE?
7752
MR. GARDNER: ABSOLUTELY, YOUR HONOR.
MR. PIUZE: HAVE A NICE WEEKEND, YOUR HONOR.
MR. GARDNER: YES.
MR. PIUZE: THANK YOU.
THE COURT: SAME TO YOU, FOLKS.

(AT 2:20 P.M., AN ADJOURNMENT WAS TAKEN
UNTIL TUESDAY, JULY 1, 2003, AT 8:30 A.M.)

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